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ABSTRACT

These booklets contain selected drug education curricula, published by the National Clearinghouse for Drug Abuse Information. The guides include those from: (1) San Francisco, California, grades kindergarten through 12; (2) Flagstaff Public Schools, Arizona, grades kindergarten through 12; (3) Baltimore County Board of Education, Towson, Maryland, grades six, nine, and 12; (4) Tacoma Public Schools, Washington, grades six through 12; (5) South Bay Union School District, California, grades kindergarten through 12; (6) New York State Education Department, grades four, five, and six; and (7) Rhode Island State Department of Education, grades kindergarten through 12. The guides include basic concepts, learning activities, and resource materials. (KJ)

H - PHS

NATIONAL CLEARINGHOUSE FOR DRUG ABUSE INFORMATION

ED0 44736

selected drug education curricula

Strand II; Sociological Health Problems - Grades 4, 5, 6
New York State Education Department
Albany, New York

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One of a Series

ED044736

An Interagency Federal Committee was convened in the winter of 1969 under the auspices of the White House to make available to the Nation's schools a variety of State and local curricula for drug education and the prevention of drug abuse. Participating in the Committee chaired by the Office of Education, DHEW, were the Bureau of Narcotics and Dangerous Drugs, Department of Justice; the National Institute of Mental Health, DHEW; and the Office of Economic Opportunity.

As an initial step, the Committee established an Interdisciplinary Panel of non-Government professionals to review some of the drug abuse curricula developed by State and local school systems. Time did not permit a review of all curricula in use throughout the country.

The curricula selected are not recommended for adoption, but are distributed only as resources to assist schools in initiating or improving programs. All schools are encouraged to submit curricula and materials to the National Clearinghouse for Drug Abuse Information. These will be reviewed by the Panel and those selected will be made available to other school systems upon request. Your cooperation will be appreciated.

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The National Clearinghouse for Drug Abuse Information, operated by the National Institute of Mental Health, is the focal point for Federal information on drug abuse. The Clearinghouse provides information on request through publications, and a computerized information service. The Clearinghouse distributes publications and refers specialized and technical inquiries to Federal, State, local, and private information resources. Inquiries should be directed to the National Clearinghouse for Drug Abuse Information, Educational Services, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

ED0 44736

INTRODUCTION

The problem of drug abuse is not a new phenomenon. Man's use and abuse of drugs dates back thousands of years. In recent years, however, the dimensions of the problem have reached frightening proportions, raising the specter of societal suicide. Contributors to our current concerns have been the easy accessibility of a myriad of drugs, a tense, stressful social environment, thrill seeking and escapism, among others.

In addressing itself to so complex a problem the discipline of education must go beyond mere dispensing of information and make a stronger effort to effect student attitudinal and behavioral change. The more traditional teaching methods will be inadequate to do the task. This implies the need for broadscale teacher training and retraining in new approaches and techniques. Periodic reinforcement will be needed if the operational style of the classroom is to change. What is required is a long-range view that will aim at the preparation of health educators and other school personnel who can address themselves to this and other serious health problems.

There must also be cooperation and involvement of all other segments of the community in a joint effort with the school if the mounting trend of drug abuse is to be reversed. The closeness of the effort needed is a condition that both the school and the community organizations will find unfamiliar, but melding of community effort is essential if the common objectives are to be met.

The tasks described above will require significant, long-term financial support and commitment. They will also require wise, perceptive leadership from national and state levels. An effective program of broad-based education should produce significant results by the end of the decade.

Interdisciplinary Panel

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PROTOTYPE
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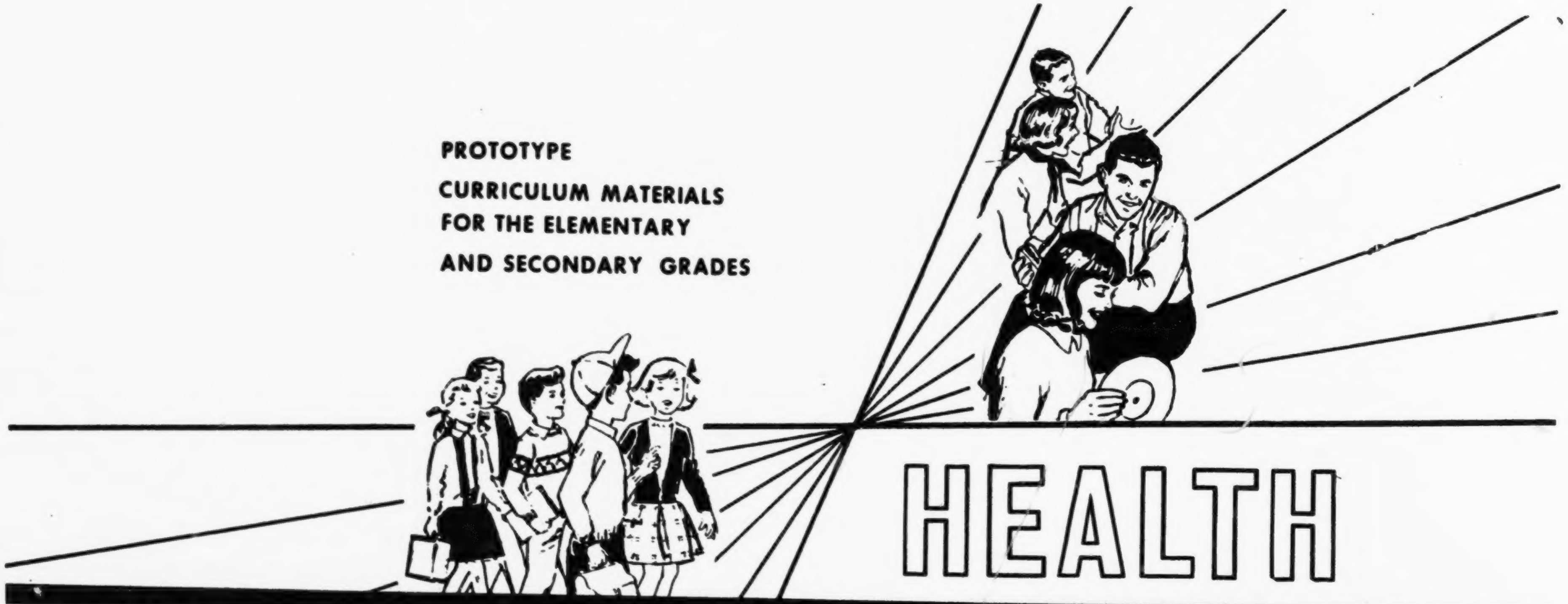

HEALTH

GRADES 4,5,6

STRAND II SOCIOLOGICAL HEALTH PROBLEMS

A. ALCOHOL
B. DRUGS and NARCOTICS
C. SMOKING

THE UNIVERSITY OF THE STATE OF NEW YORK/THE STATE EDUCATION DEPARTMENT
THE CURRICULUM DEVELOPMENT CENTER/ALBANY, NEW YORK 12224

HEALTH CURRICULUM MATERIALS

FOR GRADES 4,5,6

Strand II, Sociological Health Problems
Alcohol
Drugs
Smoking

1968 Reprint

The University of the State of New York/The State Education Department
Curriculum Development Center/Albany 12224
1967

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Director, Division of Health, Physical Education and Recreation
George H. Grover

Prefatory Note

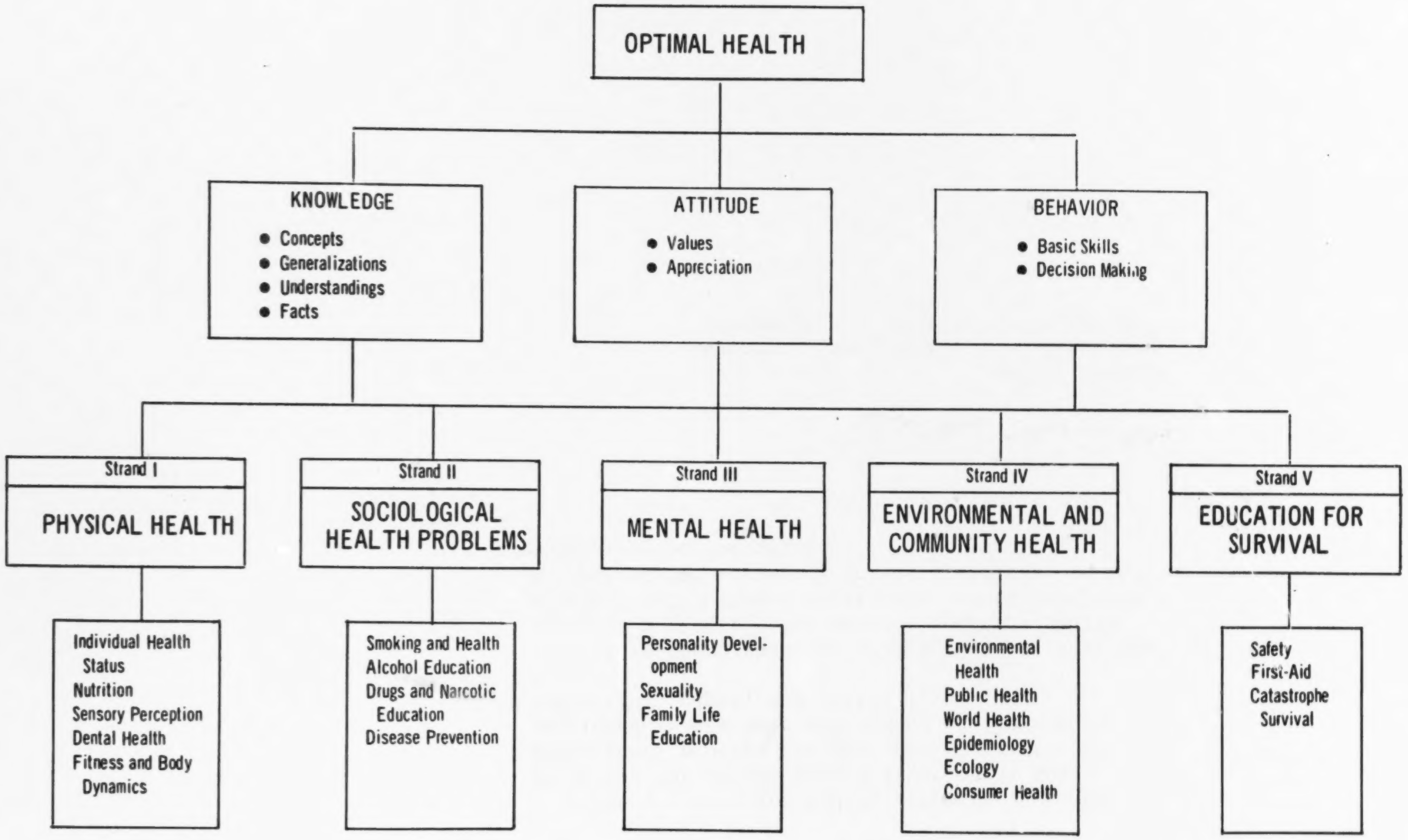
The ever increasing complexity of our society makes it essential that each school child learn the values of good health practices on a personal, community, state, and national basis.

The conservation and development of human resources has always been a function of the educational process, and good health practices developed in the home and school are keys to a successful, happy, and useful life.

It is hoped that the health concepts developed in these new curriculum materials in the health sciences will prove of real value to the children and parents of our local school districts, to the State, and to the Nation.

Walter Crewson

Walter Crewson
Associate Commissioner for Elementary,
Secondary and Continuing Education


OPTIMAL HEALTH
KNOWLEDGE
● Concepts
● Generalizations
● Understandings
● Facts
ATTITUDE
● Values
● Appreciation
BEHAVIOR
● Basic Skills
● Decision Making
Strand I
PHYSICAL HEALTH
Strand II
SOCIOLOGICAL HEALTH PROBLEMS
Strand III
MENTAL HEALTH
Strand IV
ENVIRONMENTAL AND COMMUNITY HEALTH
Strand V
EDUCATION FOR SURVIVAL
Individual Health Status
Nutrition
Sensory Perception
Dental Health
Fitness and Body Dynamics
Smoking and Health
Alcohol Education
Drugs and Narcotic Education
Disease Prevention
Personality Development
Sexuality
Family Life Education
Environmental Health
Public Health
World Health
Epidemiology
Ecology
Consumer Health
Safety
First-Aid
Catastrophe Survival

FOREWORD

This publication contains three of the topics for Strand II, Sociological Health Problems, which have been prepared as part of the K-12 health syllabus revision project. The material included herein is intended for use in grades 4, 5, and 6. Similar publications are available for these same three areas — alcohol education, drugs and narcotics, and smoking — for use in grades 7, 8, and 9 and in grades 10, 11, and 12. The health coordinator in a school system should make use of all three publications in planning a local K-12 program. Other materials to complete this strand and for the other strands shown in the chart on page iv are in various stages of planning or development and will be distributed as they are completed.

The curriculum materials presented in this prototype strand have been prepared in response to an increased public interest in the health sciences. Problems of air and water contamination, the misuse of drugs, the habituation tendencies of alcohol and tobacco, and the diet fad inspired use of food adulterants, have led knowledgeable people to demand increased health instruction in the schools of New York State.

The development of these curriculum materials as part of a K-12 program should lead to a well articulated educational program in health. The format also makes it possible for full time health teachers, physical education teachers, science teachers, broad spectrum elementary teachers, school nurse teachers, and dental hygiene teachers to adapt special areas to their own programs.

The first drafts of the manuscripts for the three parts of this strand were written by a team at the State University College at Cortland under the leadership of Dr. John S. Sinacore, Professor of Health Education. Dr. Sinacore prepared the section on drugs and narcotics; Lawrence B. O'Reilly, Assistant Professor of Health Education, wrote the section on smoking; and Leonard T. Gath, Associate Professor of Health Education, wrote the section on Alcohol. Eugene V. Bowers, Professor of Health Education, State University College at Brockport; Dr. James Quinliven, Director, Office of Public Health Education, and Miss Rita Pacheco, Supervising Public Health Educator, of the New York State Department of Health; John R. Butler, Director, Bureau of Alcoholism, and Mary M. Burgess, Supervisor of Alcohol Education, New York State Department of Mental Hygiene; reviewed the manuscript and made valuable suggestions.

John L. House, formerly Assistant in Health Education, coordinated the writing-editing efforts and established the developmental pattern in association with James A. Howarth, Associate in Elementary Curriculum, and Robert F. Zimmerman, Associate in Secondary Curriculum.

Robert H. Johnstone
Chief, Bureau of Elementary
Curriculum Development

Gordon E. Van Hooft
Chief, Bureau of Secondary
Curriculum Development

William E. Young
Director, Curriculum
Development Center

INTRODUCTION

Optimal health is dependent upon the interaction of knowledge, attitude, and behavior. The content of this health curriculum guide has been established as a five-strand approach to the concepts, generalizations, understandings, and facts; the values and applications; the basic skills; and the decision-making processes that are the keys to good health. The five-strand approach provides maximum flexibility for program development in the schools, and makes it possible to utilize the services of writer-consultants who are experts in their fields.

At the elementary school level, pupils should experience basic instruction in each of the major strands prior to the completion of the 6th grade. Elementary school health education experiences have been traditionally based upon the concept of sequential organization of the total spectrum of the health curriculum content in each grade with a gradual increase of the depth and scope of instruction as the pupil progresses through the grades.

The depth exploration of specific health areas by grade does not minimize the need to develop information from related health topics as a reinforcement to developing knowledges and concepts. The teacher will probably find that health problems which arise will require the addition of health information from related areas.

At the junior high school level individual strands might be developed in depth or a combination of strands may be developed in accord with local conditions and the developmental needs or special interests of the pupils.

A general health education course based upon content from all of the strands could constitute the initial senior high school pupil health education experience. Following this generalized overview, special interest depth studies of specific strands on an elective basis might be developed to meet specific student interests.

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ALCOHOL EDUCATION

An Experimental Unit for Grades 4,5,6

INTRODUCTION TO ALCOHOL EDUCATION

Man has used beverage alcohol from the dawn of history. It has been used in cultural rites, religious ritual, and as a medication. Yet social, medical, and personal problems have arisen from the misuse of beverage alcohol.

Alcohol education should be based upon facts in order that today's pupil may make intelligent decisions that are vital to the health and welfare of himself and the society of which he is a part.

ALCOHOL EDUCATION

(Teaching Units for Grades 4 through 12)

INTERMEDIATE GRADES
(grades 4, 5, & 6)

I. The Nature of Alcohol

II. The Use of Alcohol in the Early Days in America

III. Alcohol in the Human Body

IV. Elimination

V. Alcohol and Problems

VI. Alcohol and the Family

JUNIOR HIGH SCHOOL
(grades 7, 8, & 9)

I. The Adolescent and Alcohol

II. The Use of Alcohol in the United States

III. The Social Problems Associated with Beverage Alcohol

IV. Legislative Control and Economics of Alcohol

SENIOR HIGH SCHOOL
(grades 10, 11, & 12)

I. Alcohol and Mental Health

II. Physiological Effects of Alcohol

III. The Psychological Effects of Alcohol

IV. Alcoholism - A Medical Problem

V. Other Disease Forms Associated with Alcoholism

VI. Rehabilitation and Treatment

VII. Research Agencies and Prevention of Alcoholism

INTRODUCTION TO ALCOHOL EDUCATION

Grades 4, 5, 6

OUTCOMES:

1. To understand the nature of alcohol and its effects on family and community life
2. To understand the economic aspects of alcohol use
3. To acquire a knowledge of the uses and abuses of alcohol

ALCOHOL EDUCATION

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
I. Nature of Alcohol			
A. Definition and Properties	There are different types of alcohol.	Have students make a bulletin board for school sharing concerning the uses of alcohol in industry and medicine; and the effects of its ingestion in the human body.	
1. Ethyl alcohol	Ethyl alcohol is found in alcoholic beverages.		Today, "alcohol," generally means ethyl alcohol or grain alcohol. Ethyl alcohol is clear, colorless, inflammable, gives a burning sensation in the mouth, and has a pleasant odor. It is produced by the fermentation of sugars or starches.
2. Methyl alcohol	Methyl alcohol is highly poisonous.		Methyl alcohol has benzenes or camphor added to make it unfit as a beverage. Methyl alcohol is very toxic. It is decomposed and eliminated from the body very slowly. The chief symptoms of methyl alcohol intoxication include irritation of the mucous membranes, headaches, nausea, vomiting, muscular incoordination, colic, dilated pupils, impaired vision, blindness, delirium, coma, and sometimes death may occur as a result of methyl alcohol poisoning.
	Certain liquids are necessary for growth, others are not conducive to good health.		
B. Vitamins	Alcohol has little nutrient value.	Make a class list from library books showing body deficiencies in vitamins and minerals.	Alcohol contains no vitamins, proteins, or minerals.

ALCOHOL EDUCATION

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
C Calories			Alcohol has high calorie value. A glass of beer (8 oz.) contains about 100 calories.
	Milk and fruit juices are more nutritious than most other beverages.		One ounce of whiskey contains about 75 calories. If the whiskey is mixed with soft drink, the person gets more calories from the sugar content.
		Have students compare the body's use of alcohol with its use of proteins, fats, and carbohydrates.	
D. Glandular Action	Alcohol is a food and a drug.		Proteins mix with alcohol thus slowing absorption (meat, cheese, eggs, milk).
E. Manufacture of Alcohol	Beverage (ethyl) alcohol and industrial alcohol are manufactured differently.		Industrial alcohol is now manufactured from petroleum products. Beverage alcohol is made by fermentation of sugars produced from grains, or from sugar cane or grapes, with yeast, the end products being alcohol and carbon dioxide.
		Visit a laboratory where chemicals and compounds of alcohol are manufactured to see what part alcohol plays in production.	
F. Industrial-Commercial Alcohol Is Poisonous		Scan newspapers and articles for deaths caused by drinking industrial alcohol.	Industrial alcohol is a poison that can cause death.

ALCOHOL EDUCATION

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
G. Commercial Uses of Alcohol in Food and Medical Products, Flavoring, Solvents, Medicines, and Antiseptics	Alcohol is used to manufacture many products.	Have students examine labels on bottles in the kitchen and medicine cabinet for alcoholic content.	Shaving lotions contain as much as 35% alcohol. Vanilla extract may contain 30% alcohol and cough medicine 3%, iodine 2%. Hair tonic has about 70% alcohol.
		Have a chemist discuss uses of alcohol.	A 70% or stronger solution of alcohol cools the skin through evaporation. Used to bring down fever.
		Write to manufacturers of hair tonics and/or perfumes to see how alcohol aids in the preparation of their products.	Alcohol kills germs and is a good skin disinfectant. Used on the feet to prevent contagious skin conditions of the feet. Helps prevent bed sores in bedridden patients.
		Show a can of antifreeze or paint and study the contents used in the manufacture of the product.	Alcohol is also used for antifreeze in car radiators, solvent in paint and varnishes, plastics, cleaning solutions, cellulose products, explosives, dyes, etc.
		Film: (20 Min.) Friendly Enemy, W.C.T.U. - Uses in Industry (6th Grade).	Brewery mash, a by-product. is used as cattle feed.
H. Medicinal Uses	1. Beverage alcohol can be used for medicinal reasons and may be classified as an anesthetic, narcotic, sedative, tranquilizer, or hypnotic.	Ask a local physician for what conditions he might prescribe alcohol for a patient.	Alcohol provides energy rapidly. It may be used as a sedative.
	2. Beverage alcohol is sometimes prescribed by physicans when there is no specific drug developed to remedy a particular condition.		Alcohol increases the output of urine. It may be used as a nutritional supplement (the body uses alcohol first and stores calories from food).

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
			Alcohol intake may benefit certain heart conditions because it dilates blood vessels (angina).
			Dilation of blood vessels is sometimes described in patients who have arthritis. Alcohol is sometimes used to relieve pain, the feeling of chilliness, instability and/or tension, and to enhance appetite.
			Sometimes following an operation, there is a need for calories and sedation.
II. The Use of Alcohol in the Early Days in America			
A. Colonies	Alcohol beverages were used in the colonies.		
1. Virginia			In 1619 the Virginia Colony passed the first law against excessive drinking. In 1637 a Captain Sedgwick built the first brewery in America.
2. New England			In New England the excessive drinker was whipped and forced to wear a red "D" about his neck.
			During the American Revolutionary Period, brewing, distilling, and wine making were common. The residue was fed to the animals.

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
			In 1791, the newly formed government of the U.S. imposed a tax on distilled liquor, to control the use of alcohol, and to raise revenue. Some settlers moved to Ohio Territory to dodge the tax. Farmers in Pennsylvania refused to pay the tax, and an army was sent to enforce the law.
III. Alcohol in the Human Body	Alcohol affects the body systems and organs.	Draw and label a figure of a man showing the systems and organs affected.	
A. Absorption			Alcohol is absorbed at once, producing heat and energy.
1. Stomach	Alcohol is absorbed readily from the stomach and small intestines.		
			There is a temporary rise in hydrochloric acid in the stomach when you take in alcohol.
2. Small Intestines			Alcohol enters the bloodstream almost immediately--about 20% is absorbed from stomach and 80% from small intestines.
3. Bloodstream			
a. Transport	The bloodstream will absorb most of the alcohol and serves as a vehicle by which it is carried to other cells in the body.		Alcohol is diffused and leaves the bloodstream and enters the cells.
b. Oxidation	The liver oxidizes alcohol.		Oxidation takes place in the liver.

ALCOHOL EDUCATION

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
c. Effect on Systems	Alcohol causes several reactions within body systems.		
(1) Nervous			The bloodstream carries alcohol to the brain where it acts as a depressant on the cerebral cortex and affects: judgment euphoria, lessens inhibitions concentration and memory sense organs (vision and hearing) muscular control clumsiness reaction time lengthened
(2) Circulatory			The immediate result from the ingestion of alcohol are: 1. speeds up the heart, 2. speeds up the pulse rate, 3. causes rise in blood pressure, 4. dilates blood vessels, 5. causes person to perspire but lowers skin temperature, 6. causes a marked increase in urine output. These effects last about 15 minutes. Continued ingestion of alcohol results in a depressant action of reducing these processes.
IV. Elimination	Most of the alcohol that enters the body is eliminated by the kidneys via the urine.	Discuss the elimination of alcohol by the body.	Alcohol is eliminated in urine, breath, perspiration, and fecal wastes.
V. Alcohol and Problems	People use alcoholic beverages differently.	Class discussion - Excessive use of beverage alcohol may lead to problems.	

ALCOHOL EDUCATION

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
			Problems: auto accidents physical deterioration social problems family problems economic problems
VI. Alcohol and the Family	Families use alcohol beverages differently.		
	Alcohol may not be the real cause of problems.	Have a local court judge or physician visit and comment on the problems caused by the use and misuse of alcohol.	Deviant drinkers as a group have a large number of divorces, and they indicate that drinking was a cause of marital discord.
			Many families use alcohol with no social problems.
	There is a direct relationship between drinking in the home and use of alcohol by children.		
A. Attitudes Are Learned			Children of alcoholics are likely to become excessive drinkers because: 1. Example of excessive drinking by parent. 2. Lack of parental control and poor home environment. 3. Personality disorders of the parents predispose them to use alcohol as did their parents.
	Alcoholism is an illness.	Discuss professionals available who can treat alcoholism.	

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
			The greatest influence on a child's decision to drink or not to drink is the home. There is some evidence that parent relations play an important role. Teachers must remember that children in class may come from a family where alcohol is a problem.
B. Economic Aspects	Alcoholic beverages are a large expenditure item in some family budgets.	Compare the cost of beverage alcohol and the cost of nutritious foods.	Alcohol is an expensive item in some family budgets.
			Some families use wine and beer as custom or tradition, and the cost is figured in with the food budget.
			Americans spend about $10 billion a year for alcoholic beverage and about $70 billion for food a year.

ALCOHOL EDUCATION

Supplementary Information

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ALCOHOL EDUCATION

Suggested AudioVisual Aids

Films

Alcohol in the Human Body. Sid Davis Productions, 14 minutes, color.

Alcohol is Dynamite. Sid Davis Productions, 11 minutes, black and white.

Alcoholism. E. B. F. State Health Department, 22 minutes.

Family Affair. WCTU (Colorado University), 10 minutes.

Friendly Enemy. WCTU (Colorado University), 20 minutes.

Highball Highway. Charles Cahill Association, 5746 Sunset Blvd., Hollywood, California, 12 minutes.

I am an Alcoholic. McGraw-Hill (Brigham Young University), 17 minutes.

It's Best to Know. Onondaga Council on Alcoholism, Syracuse, New York, 8 minutes, black and white.

Nightmare of the Bold. U. S. Air Force, 8900 Broadway, St. Louis, Missouri, 53 minutes.

None for the Road. McGraw-Hill, 16 minutes, black and white.

Out of Orbit. M-S-B-A Michigan State Board of Alcoholism, 14 minutes, color.

Problem Drinkers. MGH - State Health Department, Film Library, 19 minutes.

Should You Drink? McGraw-Hill - University of Illinois, 22 minutes, black and white.

The Alcoholic Criminal. N.E.T. (Indiana University), 30 minutes.

The Bold Faces the Facts. WCTU, 1730 Chicago Avenue, Evanston, Illinois, 13 minutes.

The Bottle and the Throttle. Sid Davis Productions, 10 minutes, color.

The Brain is the Reason. WCTU, 1730 Chicago Avenue, Evanston, Illinois, 20 minutes.

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The Mixer. M.R.A. Mutual Insurance Co., Columbia, Missouri, 10 minutes.

The Silent Witness. W.M.S. Merrill Co., Cincinnati, Ohio, 28 minutes.

To Your Health. N.Y.S. Department of Mental Hygiene, 10 minutes, color.

What About Alcoholism. McGraw-Hill T.F., 11 minutes.

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DRUGS AND NARCOTICS

An Experimental Unit for Grades 4,5,6

OVERVIEW

Drugs are increasingly becoming a part of the everyday lives of people. There has been a dramatic increase in the number of kinds of drugs available to the general public for varying ailments and needs. In order that these substances may be used properly and safely, it becomes necessary to educate people as to the nature of drugs, the positive contributions they can make, and the dangers involved in their misuse.

There has been a growing concern among health authorities in this country with the overly casual approach people have to the use of these agents. This is reflected not only in drug experimentation among our youth, but with an increased rate of accidental drug poisoning, suicide, and general misuse of drugs among adults and youth alike.

Respect for and understanding of these powerful agents should start at an early age for the protection of the individual and ultimately the society he is a part of.

The term "drug" means articles recognized in the official United States Pharmacopoeia, official Homeopathic Pharmacopoeia of the United States or official National Formulary, or any supplement to any of them; articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; and articles (other than food) intended to affect the structure or any function of the body of man or other animals; and articles intended for use as a component of any article specified.

DRUGS AND NARCOTICS

(Teaching Units for Grades 4 through 12)

INTERMEDIATE GRADES
(grades 4, 5, & 6)

I. Early Man's Use of Drugs

II. Modern Drugs and Their Contributions

III. The Use and Misuse of Drugs

JUNIOR HIGH SCHOOL
(grades 7, 8, & 9)

I. The Development of Modern Drugs

II. Prescription Drugs

III. Nonprescription Drugs (Over-the-Counter Drugs)

IV. Safeguarding Drugs and Their Use

V. The Historical Use of Drugs

VI. Habit Forming and Addicting Drugs

SENIOR HIGH SCHOOL
(grades 10, 11, & 12)

I. Addiction and Habituation

II. The Narcotic Drugs

III. Marihuana

IV. Stimulants

V. Drug Traffic

VI. Legislation

VII. Rehabilitation of the Addict

OUTCOMES

THE PUPIL IN GRADES 4, 5, and 6 SHOULD:

- understand man's uses of drugs.
- appreciate the role drugs play in the control of disease and pain.
- understand the nature and basic differences among drugs.
- realize that drugs are potent agents that have potential for serious harm if misused.

DRUGS

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
I. Early Man's Use of Drugs	Man has used drugs in one form or another for thousands of years.	Refer to The Suggested Student Reading List for student outside readings.	There is evidence that drugs were used as far back as 2100 B.C.
A. Magical Relationship	The early use of drugs was associated with magic.		Pain was once thought to be caused by demons. Pain relieving drugs that "cast out the demons" were considered to have magical qualities.
B. Pain Relievers	Ancient cultures developed pain relieving drugs from plants.		Aesculapius, the Greek God of Medicine, used a potion made from herbs to relieve pain.
		Which drugs used today are derived from plants?	Curare - a muscle relaxant Digitalis - Foxglove - blood vessel dilator Ephedrine - a stimulant - constricts small arteries Penicillin - penicillium - antibacterial drug Quinine - Cinchona bark - antimalarial Reserpine - Rauwolfia serpentina (shrub from India) - a tranquilizer
	While sleep producing drugs (anesthetics) were known to man since 400 B.C. they were not used for surgery until the 19th century.		Crude forms of some of these drugs were used long before the era of modern medicine.
C. Lasting Value of Some Early Drugs	A number of drugs in use today were discovered and used by primitive people, e.g. curare was used by natives who placed the drug on the tips of their darts and arrows to paralyze the game they hunted. Modern medicine uses it as a relaxant.		

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
D. Drugs - Helpful or Harmful	Even in earliest times, man was concerned with the use of drugs.		The Greeks used poisonous drugs to carry out capital punishment, e.g. the execution of Socrates. At the time of Hippocrates, drugs were used to relieve pain and treat illness.
	Many of the early medicines had no effect on the ailments they were used for. People using them felt better because they thought they were being helped. The same thing is true today.	Survey the number of drugs, home remedies, and concoctions used for the common cold. What purpose do they serve?	Sometimes a drug has value as a suggestive aid. With reference to drugs for the common cold they serve to treat symptoms, they do not treat the disease state itself.
	Our forefathers learned about drugs through experience. Some drugs proved to be poisonous, some helpful, and others produced lifelong addiction.	What means do we now use to test drugs before they are used by people?	Shakespeare often refers to addicting drugs in his works. Because they often caused death, they fell into disrepute and were discredited by the physicians of that time. Drugs were used by the sorcerers of that era.
II. Modern Drugs and Their Contributions			
A. Disease	Drugs play an important role in the control of disease.		Drugs like sulfanilamides help to destroy disease causing bacteria. Drugs can control body reactions such as inflammatory reactions in arthritis and convulsions in epilepsy Numerous drugs can relieve pain. These range from aspirin to the powerful addicting opiates.

DRUGS

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
			Drugs that affect a person's mood may be helpful to a person during a period of distress or tragedy.
1. How Drugs Function	Drugs may destroy some disease germs, control body reactions, relieve pain, and affect a person's mood.		
	Drugs play an important role in surgery, painless dentistry and childbirth.		Drugs are used as anesthetics for surgery patients and to disinfect surgical instruments and dressings.
2. Effects of Drugs	Drugs can help people overcome disease effectively and quickly.	Compare incidence of bacterially caused communicable diseases in 1900 as compared to present.	The incidence of a disease can be minimized by prompt drug therapy.
	Some diseases do not occur as frequently because drugs can prevent them or overcome them before they can be spread to others.	Invite the school nurse to discuss a specific problem like "pinkeye." What role do drugs play in the treatment and control of this disease.	The incidence of many bacterially caused diseases are under much greater control (tuberculosis, bacterial pneumonia, streptococcal infections, etc.)
	People tolerate the ravages of disease better because of pain relieving and mood modifying drugs.		
	Drugs have made surgery safer and painless.		
	Our society is healthier and people live longer due to improved diet, better medical care, and proper use of drug medication.	What kinds of health problems are prevalent in more primitive societies where helpful drugs are not available to control disease?	Life expectancy in the United States is over 70 years. In countries where drugs and modern medicine are not available, life expectancy is considerably less.

DRUGS

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
III. The Use and Misuse of Drugs			
A. Types of Drugs			
1. Prescription Drugs	Prescription drugs can only be legally purchased with a doctor's prescription.	Why is the physician the only one who should prescribe drugs?	Drugs can be dangerous and should be used with care.
		Who are some of the people who are called "doctor" but are not medical doctors and therefore cannot prescribe drugs?	People who are sometimes called "doctor" but are not medical doctors include pharmacists, chiropractors, podiatrists, optometrists, and college professors.
2. Nonprescription Drugs	Nonprescription drugs may be bought without a doctor's prescription. Many of them contain a warning label, e.g. "if the condition persists, see a doctor."	Have students make lists of patent medications used for colds, muscle aches, headaches, upset stomach, etc. Invite the school physician to review the lists and evaluate the uses of these medications.	
B. The Proper Use of Drugs	Drugs are chemical substances which can be harmful if not properly used.		
1. Directions	The directions given by the doctor for the use of prescription drugs should be followed carefully.		Overdoses of drugs can be harmful while underdoses render the medication ineffective.
	Reading the labels of over-the-counter drugs is important so one may be guided in their proper use and possible dangers.	Inspect the labels of a number of nonprescription drugs for directions in their use and possible side effects.	The effects of a drug in a given person are never completely predictable. Drugs should be used only when necessary and in proper amounts.

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
2. Storage	Some medicines must be refrigerated to prevent spoilage.		
	Old medicines in the medicine chest should be flushed down the toilet.	With a parent, evaluate the contents of a medicine chest. Dispose of old medicine, unlabeled bottles, outdated external antiseptics, e.g. iodine.	Medicines can "spoil" if allowed to stand too long and may become harmful.
3. Usage	Prescribed amounts of medicine may be helpful. Overdoses can be harmful.		Overdose of aspirin is a leading cause of accidental death among children.
	Medicines should be kept out of the reach of young children.		
	All drugs should be stored in medicine chests that can be locked.		
	Parents or adults must supervise their children's use of all drugs including the use of aspirin, vitamins, and external antiseptics.		
	Drugs should be accepted only from responsible adults; physicians, dentists, parents, relatives.		

DRUGS AND NARCOTICS

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SMOKING AND HEALTH

An Experimental Unit for Grades 4,5,6

OVERVIEW

In view of the conclusive data indicting cigarette smoking as a cause of lung cancer, and additional evidence indicating that other cardiorespiratory illnesses may also be caused by smoking, the task of educating our population about the use of tobacco is urgent. If present lung cancer rates continue, we can expect that 1,000,000 of today's school children will develop lung cancer during their lifetime.

Research indicates that nearly 10% of habitual smoking begins at the seventh grade level and that countless youngsters experiment with smoking at earlier ages. It is, therefore, essential that instruction concerning the use of tobacco be implemented in the intermediate grades.

It is easier to discourage the formation of a habit than it is to eliminate the habit once it has developed. Thus, the pupil in grades 4, 5, and 6 must be provided the opportunity to appreciate the significance of tobacco, realize the health hazards associated with the use of tobacco, and develop understandings and attitudes which will lead him to an intelligent decision relative to his use or nonuse of tobacco.

SMOKING AND HEALTH

(Teaching Units for Grades 4 through 12)

INTERMEDIATE GRADES
(grades 4, 5, & 6)

I. Your Decision About Smoking

II. Mans' Use of Tobacco

III. Tobacco and Health

IV. Deciding About Smoking

JUNIOR HIGH SCHOOL
(grades 7, 8, & 9)

I. The Advertisement and Promotion of Tobacco

II. Developing the Smoking Habit

III. Physiological Effects of Tobacco

SENIOR HIGH SCHOOL
(grades 10, 11, & 12)

I. Attitudes Toward the Use of Tobacco

II. Psycho-social Factors Related to Tobacco Use

III. Smoking Research and Reports

IV. Smoking Among High School Students

OUTCOMES

THE PUPIL IN GRADES 4, 5, AND 6 SHOULD:

----understand the development of tobacco production and use so as to better appreciate its significance in America today

----realize that the increased consumption of tobacco in the United States is paralleled by a substantial increase in cardiorespiratory diseases

----know that modern research has demonstrated a causal relationship between lung cancer and smoking

----realize that smoking is detrimental to one's health and growth, and undermines the individual's ability to maximally participate in physical activities

----be able to arrive at a sound and sensible decision about tobacco use, based on scientific evidence

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
I. Your Decision About Smoking	The young person's decision about smoking is one of several important decisions in his life and should be based on a firm foundation of scientific knowledge.	Students dramatize a situation in which a ten-year old is encouraged to smoke by his friends. Ask class members how they might have reacted in a similar situation.	It is estimated that 10% of habitual smoking begins in grade 7.
A. Important Considerations	Your decision about smoking will greatly influence your health as an adult.	SR #12	Teachers in the intermediate grades should expect that experimentation with tobacco products will sometimes occur at much earlier ages.
1. Effects of Smoking on One's Health			
a. Content of Smoke	Smoke from tobacco is made up of gases and particles.		Lung tissue and bronchial tubes in particular are affected.
b. Physiological Effects	When a person inhales smoke these gases and particles enter his breathing passages and are deposited on the surfaces. Some are absorbed in the blood and some remain to produce damaging effects on the lining membranes.		Normally the surfaces of the breathing mechanism are kept clean by the movement of little "hair-like" structures called cilia. This means that dust particles etc. are sort of "swept away" by their movement. The cigarette smoke (tobacco smoke) slows down or even stops this action. This means the "tar" will stay in contact with the surfaces over a longer period of time, with the result that irritation or infection may occur. It is thought that this condition may eventually lead to cancer.

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
			Effects on heart and circulation: Increase in pulse rate Contraction of small blood vessels Lowering of skin temperature Increase in blood pressure Other effects: Chronic cough (in heavy smokers) Unattractive brown stains Lung cancer Shorter life Emphysema (possible) Effects on beginning smokers: Dizziness Faintness Rapid pulse Clammy skin Nausea Vomiting Diarrhea Irritability Possibly impaired vision or hearing All of the above effects may be associated with the beginner in smoking.
2. Effects of Smoking on Physical Performance	Men and women who began the smoking habit several years ago did not have the knowledge of the harmful effects of smoking that we have today.	Suggest that each student ask the following question of his parents: If you could make your decision to smoke or not to smoke all over again, would you start smoking?	A logical response to the student question - "Why do my parents or doctor smoke, if we know that it is not a healthful habit?", is to point out that when many adults started to smoke, we lacked any scientific evidence linking smoking with heart disease, lung cancer,

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
		If parents would explain why they answered the question in the way they did, the class could compile results of the probe and probably develop quite a convincing list of reasons why smoking is undesirable.	etc. This presents an excellent opportunity to illustrate the difficulty one has in "breaking" a well-established habit.
3. The Expense of Smoking		Compute the annual cost of smoking one pack of cigarettes per day.	One insurance company has declared a 5% premium reduction for the nonsmoker. Other companies are also considering this move.
4. The Smoking Habit May Last Your Entire Lifetime	The decision to smoke or not to smoke should be based upon an intelligent interpretation of facts and not upon peer pressure or a personal desire to appear "grown-up."	Have students survey the community to determine where No Smoking signs are posted. Discuss reasons why smoking is prohibited in these areas.	
5. Safety Implications of Smoking		Invite a representative of your local fire department to discuss the topic--"Smoking as a Cause of Fires."	The two leading causes of fires in the home are careless smoking habits and children playing with matches. The National Board of Fire Underwriters reports that 25% of the fires reported to them are caused by these two hazards.
		Arrange for a forester to visit your class to speak about forest fires.	Tobacco amblyopia (dimness of vision) is common among smokers. Pipe and cigar smokers especially complain of difficulty during night driving. The implications for traffic safety are clear. The loss of wildlife and forests due to carelessly discarded cigarettes, cigars, and pipe ash, is very great.

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
6. Attitudes of Parents and Other Family Members	A young person who is largely dependent on his parents for food, shelter, and other life necessities, should consider the attitudes of his family before starting to smoke.	Arrange for student panels to discuss the topic: "To what extent should parents make decisions for me?"	
7. Uniqueness of the Individual	Each individual is unique and therefore each of us arrives at our decision about smoking a different way.	Have students prepare a brief essay describing their personal reasons for making a decision about smoking.	Approximately two-thirds of our adult women do not smoke. More than one-third of adult men do not smoke.
B. Making the Right Decisions	The disadvantages of smoking far outweigh any "advantages" one might imagine.	Ask students to fold a piece of notebook paper in half. On one portion have them write "The Advantages of Smoking." On the other portion of the paper have your students list "The Disadvantages of Smoking." Ask each student to proceed to list all of the advantages and disadvantages he can think of. The teacher may combine the results and later discuss the many disadvantages of smoking as compared to the few (if any) advantages.	
1. A Mature Decision Based on a Clear Understanding of Tobacco and its Use	Whether the individual starts to smoke or not, the decision is ultimately a personal one. The disadvantages of smoking are overwhelming.	FS #3; SR #3	Motivational research has demonstrated that in developing human behavior patterns it is desirable to involve the student in the process of decision-making. An objective evaluation of smoking should result in the conclusion that smoking is undesirable.

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
2. The Extent to Which a Person is "Grown Up" is Not Measured by His Decision to Smoke	One does not have to smoke to act grown up. The ability to make an individual, personal decision not to smoke in spite of the opinions and practices of friends and acquaintances is an evidence of maturity.	Divide the class into small groups of no more than five members each. Students select a leader for their group. Each group may discuss the topic, "What Makes a Person Truly Grown Up?" After 12 to 15 minutes of discussion reassemble the class and have each leader report on the discussion of his group. Encourage general class discussion to determine those qualities which seem to characterize the mature person.	
II. Man's Use of Tobacco	Man has used tobacco for several centuries.		
A. Early Use of Tobacco (1492-1600)			
1. American Indians	Europeans learned about tobacco when they explored the New World.		
2. Canadian Indians			Records from Cartier's exploration indicate that Canadian Indians cultivated tobacco and smoked it in pipes.
3. Natives of Mexico and Central America	There is some historical evidence suggesting that the Aztecs and Mayans developed the first cigarettes.		

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
4. Europe (Middle 1500's)	Early users of tobacco were not aware of the consequences of smoking.		
B. The Middle Period (1600-1800)			
1. English Colonies in America	The colonists found that tobacco was a popular trade item and it became a major industry before 1700.	FS #1	
C. Recent History (1800-Present)			
1. Expansion of the Industry	The introduction of cigarette-making machines was an important factor in the expansion of the tobacco industry.		
2. Increased Use of Cigars and Cigarettes			
3. Era of Tobacco Reform (1895-1921)	Efforts to control the use of tobacco were evident in the latter 19th century.		
a. Many States Banned the Sale of Cigarettes			
b. Legal Measures Had No Lasting Influence	As with the prohibition of alcoholic beverages, public sentiment overwhelmed the attempts to ban cigarette sales.		

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
4. The Modern Tobacco Era	Tobacco production and distribution has become a very important segment of our national economy.		Today, Americans are spending approximately $8,000,000,000 annually on tobacco products.
a. The United States Is a World Leader in Tobacco:		F #6	
1) Production			
2) Exportation			During the 1960's the annual exports from the United States averaged between 20 and 25 billion cigarettes.
3) Consumption			The Federal Governments' tax on cigarettes (8¢ per pack) produces nearly 2 billion 70 million dollars per year. The states realized an additional 1 billion 200 million dollars from their tobacco taxes. New York City levies an additional 4¢ tax per pack and this measure produced 41 million dollars in 1964.
b. Certain of Our States Base a Large Portion of Their Economy on Tobacco Industry			
III. Tobacco and Health			
A. Causes for Concern in Recent Years		Use overhead projector with overlay to compare the death rates from cardiorespiratory disease in 1930 with the present rates.	Researches cited in the Surgeon General's Report indicate that the incidence of coronary heart disease is two to three times higher in smokers than in nonsmokers.
1. Increase in Heart Disease	The incidence of heart disease, lung cancer, and other respiratory diseases has increased rapidly since 1900.		

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
2. More Deaths Due to Lung Cancer	The incidence of lung cancer is increasing more rapidly than any other form of cancer and its increase parallels the increased consumption of cigarettes in the United States.	Compare the increased rates of lung cancer, heart disease, etc., with the increased per capita consumption of tobacco. The students should be encouraged to note relationships between increased tobacco sales and the corresponding increase in lung cancer.	Lung cancer is now the leading cause of cancer death among men. The lung cancer rate has increased ten times over what it was 30 years ago.
3. Shortened Life Expectancy of Smokers			While the per capita consumption of cigarettes (persons 15 years and older) has increased approximately 30 times since 1900, there is a marked decline in the consumption of cigars and pipe tobacco.
B. Increased Tobacco Use in the United States			
1. Per Capita Cigarette Consumption Increased Since 1900	Present trends of increased cigarette smoking by women suggest that in the future, the incidence of lung cancer among women will approach that of men.	Invite the school physician or school nurse-teacher to speak to your class about the increase in lung cancer, heart disease, and other illnesses associated with smoking. FS #5; SR #1	An increasing proportion of women are smoking today than in past years. Research completed in February 1966 has shown that increased lung cancer and coronary heart disease rates have been demonstrated in female smokers. In 1916, the American public smoked 25 billion cigarettes. By 1963 the figure had risen to 524 billion cigarettes.
2. Corresponding Increase in Incidence of Lung Cancer and Other Cardio-respiratory Illnesses		Students develop exhibits for your school health or science fair.	It is estimated that a male smoker who has smoked for 20 years loses on the average about 5 years of life expectancy.
3. Consumption of Pipe Tobacco and Cigars Has Decreased.			

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
4. Smoking by Teenagers Has Increased	The reasons why young people begin to smoke are evidence that they are unaware of the hazards of smoking.	Students might suggest various reasons why young people begin to smoke. Arrange these reasons on questionnaires and request that those who smoke check the reasons why they began smoking. Distribute to students in grades 7, 8, and 9. Tabulate results.	
C. Surgeon General's Report	Until recent years, our knowledge of tobacco's effects on the body has been shrouded in myth, superstition, and lack of knowledge.		Foremost among the studies which have linked cigarette smoking with lung cancer, is the Report to the Surgeon General. It is recommended that the teacher refer to this report for additional information.
1. Report Made in 1964	The Surgeon General's Report on Smoking and its conclusions have been accepted by the medical profession and other professional groups.		
2. Research Findings:			
a. Cigarette Smoking Is a Cause of Lung Cancer	Overwhelming evidence has been compiled which indicts cigarette smoking as a cause of lung cancer.	Discuss the nature of malignant growth, emphasizing the low survival rate from lung cancer.	Lung cancer rates have increased ten times in the past 30 years. Lung cancer now kills over 41,000 Americans annually, and we can expect the number to increase.
b. The Incidence of Heart Disease is Higher Among Smokers Than Nonsmokers		Display the American Cancer Society exhibit - a wheelbarrow of cigarette butts and a jar of "tar." Perhaps your students can create equally effective displays.	The lung cancer rate is approximately 20 times lower among the nonsmokers. Lung cancer is a largely preventable disease; it is estimated that 75% of lung cancer is caused by smoking.

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
c. Other Respiratory Diseases Are More Common Among Smokers			
3. People Who Have Never Smoked Are Least Apt to Die From Lung Cancer	The surest way to protect oneself from premature death from lung cancer is to refrain from smoking.	F #8 Plan a socio-drama to review the evidence indicting cigarette smoking as a cause of lung cancer.	The percentage of American men aged 35 who may expect to die before the usual retirement age of 65 has been calculated as follows: -- nonsmokers .... 23% -- cigar and pipe smokers .. 25% -- cigarettes less than one-half pack a day ..... 27% -- one-half to one pack .... 34% -- one to two packs per day .... 38% -- two or more packs per day 41%
D. Tobacco and Youth			
1. Effects on the Respiratory System	The use of tobacco leads to "breathlessness" in the smoker.	Suggest that students ask smoking parents whether smoking has an effect on one's breathing and appetite.	One characteristic of smokers is their shortness of breath, due to congestion of the breathing passages by smoke.
a. Interferes With Normal Breathing	Smoking is likely to reduce a person's ability to participate effectively in physical activities.	Display set of "I Don't Smoke" posters featuring outstanding athletes. These posters are available from the American Cancer Society.	
b. Athletes Are Instructed Not to Smoke	Professional athletes who smoke generally have superior ability which would probably improve if they didn't smoke.		

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
c. Tendency Toward More Frequent Colds of Longer Duration	Retardation of ciliary action may aggravate cold symptoms.		The susceptibility that many smokers appear to have toward the common cold is probably due to the fact that tobacco smoke interferes with the proper functioning of our protective mucus lining in the nose and throat. How smoking interferes with normal breathing: Tobacco smoke decreases the motility work-effectiveness of the cilia (hair-like structures on the walls of the respiratory system) hence an increased tendency to accumulate impurities that would normally be "moved out" by the cilia. There is a reduction of ventilary function among smokers when compared with nonsmokers--Surgeon General's Report-1964-Page 302.
2. Effects on the Digestive System		F #1	
a. Smoking Tends to Reduce One's Appetite	During the growing years, smoking interferes with one's normal growth because of the depressing effect of tobacco on the appetite.		Although smoking does not stunt one's growth, any substance which acts as an appetite depressant would influence the intake of nutrients essential for normal growth and development.
b. Interferes with the Ability to Taste and Enjoy Food			

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
3. Effects on Heart a. Smoking Increases Heart Rate		Suggest that students record the pulse rates of their smoking family members (while sitting) before and after smoking a cigarette. Graphs can be developed to record the variations in rates. Compare findings in class.	It is not uncommon immediately after a cigarette has been smoked that the individual's heart rate would increase by 20 beats per minute. This may last for as long as twenty minutes after the smoking has ceased. This increase results from a stimulation of sympathetic ganglia. Both systolic and diastolic blood pressure are increased. Flow of blood in the peripheral blood vessels is decreased, causing the temperature to drop slightly in the fingers and toes.
1) Disadvantages to the Athlete		A student committee might prepare a bulletin board on "Smoking and Fitness."	
2) Affects Efficiency of Body Muscles			
4. Growth and Development a. Decreases the Desire for Food	For maximal growth, development, and performance, one should avoid the use of tobacco.	A member of the class might write to Roswell Park Memorial Institute, Buffalo 3, New York, and request a set of posters on smoking and health. These may be displayed in a prominent location in your school.	
b. Deprives Body of Fresh Air Necessary for the Growth of Tissue			Smoking causes an increased secretion of digestive fluids and a slowing down of the digestive process. The result is a decrease in appetite. Smoking deadens the sense of taste. Decrease in the appetite results.

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR TEACHERS
			Smoking increases heart rate (pulse) and contracts blood vessels. The heart must do added work to increase blood flow by increasing rate and pressure.
IV. Deciding About Smoking	A wise decision is based upon factual information and mature judgment.		Alleged rewards of smoking include: Improvement of the self-image, feeling of independence, release of tension due to: insecurity, frustration, restlessness, oral gratification, and the dulling of sensitivity.
			Risks of smoking include: Physiological habituation, and possible acquisition of coronary heart disease, cancer, emphysema, bronchitis, and other diseases.
			Immediate effects of smoking are "tobacco breath," staining fingers, and cough due to dryness of mouth and throat.
			Smoking also increases the possibility of fire and incidental damages to clothing and furnishings.

SUPPLEMENTARY INFORMATION FOR TEACHERS

It is not clear exactly how tobacco was introduced in Europe. However, it was used mainly as a medicine until 1600. This "medical discovery" was first hailed in Portugal, where tobacco was recommended in poultices, unguents, and as cathartics and dentifrices. Even in the latter 17th century, it was used to ward off plague and to cure cancer.

The smoking habit was greatly encouraged in England when Sir Francis Drake returned to England in 1586 with quantities of tobacco captured in the West Indies. He returned with leaves, seed, and clay pipes. From this day on, pipes have been used widely in England and other parts of Europe.

Sir Walter Raleigh was one of the first to take up the smoking habit and he was largely responsible for making smoking "respectable" in Elizabethan court circles. The smoking habit disgusted many Englishmen, but the young men of London soon learned the habit, and history tells us, practiced the revolting practices aptly called the Gulpe and the Retention.

Snuff is a powdered form of tobacco which is chewed, rubbed on the gums and teeth, and inhaled through the nose. Snuff taking was introduced in Europe from America during the 16th century and was popular until the end of the 1800's.

The major mode of tobacco consumption during the Colonial Period was pipe smoking.

The Jamestown cultivations were developed by John Rolfe, who grew tobacco from seed sent to him from either South America or the West Indies.

England believed that tobacco was harmful and prevented the colonists from growing food crops. The colonists, however, maintained that tobacco was their major staple and a medium of exchange.

During the Revolutionary Period the cigar was introduced to the colonies by General Israel Putnam.

Cigarette smoking was relatively rare in the U.S. until the close of the Civil War.

The chief method of tobacco consumption during the first half of the 19th century was chewing. It became a prideful departure from the accepted European patterns of consumption. Tobacco chewing became a distinctly American custom. It had originally been a habit of seamen and common workers.

In all American wars, three factors appear to have increased the extent of tobacco use:
1) removal of family restrictions
2) indulgence in tobacco as an escape from the rigors of military life
3) the phenomena of "imitated behavior" when people are grouped together

The increased use of cigarettes led to the imposition of a cigarette tax in 1864.

During this period, 14 states banned the sale of tobacco, largely through the efforts of temperance groups.

By 1930, all prohibitory regulations had been repealed. This led to the doubling of cigarette sales by 1930.

The majority of tobacco reformers believed that tobacco use was physically and mentally harmful and that it undermined one's moral life.

SMOKING AND HEALTH

STUDENT REFERENCES (GRADES 4-12)*

Pamphlets

American Cancer Society (local unit)

1. *Answering the most-often-asked questions about cigarette smoking.*
2. *I'll choose the high road.*
3. *Shall I smoke?*
4. *To smoke or not to smoke.*
5. *Where there's smoke.*
6. *Your health and cigarettes.*

New York State Tuberculosis and Respiratory Disease Association, Inc.

7. *Here is the evidence - you be the judge.*

Public Affairs Committee

8. *Cigarettes and health.* Public Affairs Pamphlet No. 220A. New York. 1962.
9. *Emphysema - why the breath of life falters.* Public Affairs Pamphlet No. 326. New York.
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U.S. Department of Health, Education and Welfare

11. *Facts for teen-agers, - smoking, health, and you.* Children's Bureau Publication No. 424-1964. Washington. 1966.
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17. *Cigarette ads: a study in irresponsibility.* 16:33-36. December 1962.

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20. *Embattled tobacco's new strategy.* Fortune. 67:100-102. January 1963.

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____ *Tobacco consumption in the United States, 1880-1955.* By Milmore, B.K., & Conover, A.G. Addendum Public Health, Monograph No. 45. 1956.

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Teachers Guide

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SMOKING AND HEALTH

SUGGESTED AUDIO-VISUAL AIDS

Filmstrips

1. **Life in Jamestown.** Curriculum Materials Corporation, 1319 Vine Street, Philadelphia 7, Pennsylvania.
2. **Nature's Filter.** American Temperance Society, 6840 Eastern Avenue, N.W., Washington 12, D. C.
3. **What About Smoking.** (with 33 1/3 record). Family Films, Inc., 5823 Santa Monica Boulevard, Hollywood 38, California.
4. **I'll Choose the High Road.** American Cancer Society, New York State Division, 40 Franklin Street, Rochester, New York 14604. (Local ACS unit.)
5. **To Smoke or Not to Smoke.** American Cancer Society, New York State Division, 40 Franklin Street, Rochester, New York 14604. (Local ACS unit.)

Films

1. **Alcohol and Tobacco: What They Do to Our Bodies.** Coronet Films, 16 minutes, black and white.
2. **Is Smoking Worth It?** American Cancer Society, 19 minutes, black and white.
3. **Tobacco Valley.** Shade Tobacco Company, River Street, Windsor, Connecticut 06095, 27 minutes.
4. **Backbreaking Leaf.** Syracuse University Film Library, 30 minutes.
5. **Cigarama.** Sterling Movies, 375 Park Avenue, New York 22, New York, 12 minutes, black and white.
6. **Point of View.** New York State Tuberculosis and Respiratory Disease Association, 105 East 22nd Street, New York, New York 10010. (Inquire of local unit.)
7. **The Huffless Puffless Dragon.** New York State Tuberculosis and Respiratory Disease Association, 105 East 22nd Street, New York, New York 10010, 9 minutes, color. (Inquire of local unit.)
8. **Breaking the Habit.** American Cancer Society, 6 minutes, color.

Films (Cont'd)

9. Smoking and Lung Cancer. Film Library, New York State Department of Health, 84 Holland Avenue, Albany, New York 12208, 29 minutes, black and white.
10. Smoking and You. Film Library, New York State Department of Health, 84 Holland Avenue, Albany, New York 12208, 11 minutes, color.
11. Smoking Anyone. Film Library, New York State Department of Health, 84 Holland Avenue, Albany, New York 12208, 25 minutes, color.
12. Tobacco and the Human Body. Film Library, New York State Department of Health, 84 Holland Avenue, Albany, New York 12208, 15 minutes, black and white.
13. Who Me. Film Library, New York State Department of Health, 84 Holland Avenue, Albany, New York 12208, 14 minutes, color.

SMOKING AND HEALTH

SOURCES OF ADDITIONAL MATERIALS AND INFORMATION

American Cancer Society, New York State Division (or local unit), 1010 James Street, Syracuse, New York 13202

National Clearing House of Smoking and Health, 4040 N. Fairfax Drive, Arlington, Virginia 12203

New York State Committee on Hazards of Smoking, (an interagency committee), Miss Dolores Floss, Coordinator;
c/o New York State Department of Health, 855 Central Avenue, Albany, New York 12206

New York State Health Department, James J. Quinliven, M.D., Director of Public Health Education, Albany,
New York 12208

____ Miss Dorothy Nelson, Program Director - Smoking Education, 855 Central Avenue, Albany, New York 12206

____ Roswell Park Memorial Institute, 666 Elm Street, Buffalo, New York

New York State Heart Assembly, Inc., 3 West 29th Street, New York, New York

New York State Tuberculosis and Respiratory Disease Association, Inc., 105 East 22nd Street, New York
New York 10010

U. S. Children's Bureau, Division of Reports, Washington, D. C. 20201

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One of a Series

An Interagency Federal Committee was convened in the winter of 1969 under the auspices of the White House to make available to the Nation's schools a variety of State and local curricula for drug education and the prevention of drug abuse. Participating in the Committee chaired by the Office of Education, DHEW, were the Bureau of Narcotics and Dangerous Drugs, Department of Justice; the National Institute of Mental Health, DHEW; and the Office of Economic Opportunity.

As an initial step, the Committee established an Interdisciplinary Panel of non-Government professionals to review some of the drug abuse curricula developed by State and local school systems. Time did not permit a review of all curricula in use throughout the country.

The curricula selected are not recommended for adoption, but are distributed only as resources to assist schools in initiating or improving programs. All schools are encouraged to submit curricula and materials to the National Clearinghouse for Drug Abuse Information. These will be reviewed by the Panel and those selected will be made available to other school systems upon request. Your cooperation will be appreciated.

Selected curricula have been reprinted with the permission of the originating school systems. Single courtesy copies are available from the National Clearinghouse for Drug Abuse Information. An order blank to the Superintendent of Documents, GPO appears on the back of this publication if additional copies are desired.

The National Clearinghouse for Drug Abuse Information, operated by the National Institute of Mental Health, is the focal point for Federal information on drug abuse. The Clearinghouse provides information on request through publications, and a computerized information service. The Clearinghouse distributes publications and refers specialized and technical inquiries to Federal, State, local, and private information resources. Inquiries should be directed to the National Clearinghouse for Drug Abuse Information, Educational Services, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

INTRODUCTION

The problem of drug abuse is not a new phenomenon. Man's use and abuse of drugs dates back thousands of years. In recent years, however, the dimensions of the problem have reached frightening proportions, raising the specter of societal suicide. Contributors to our current concerns have been the easy accessibility of a myriad of drugs, a tense, stressful social environment, thrill seeking and escapism, among others.

In addressing itself to so complex a problem the discipline of education must go beyond mere dispensing of information and make a stronger effort to effect student attitudinal and behavioral change. The more traditional teaching methods will be inadequate to do the task. This implies the need for broadscale teacher training and retraining in new approaches and techniques. Periodic reinforcement will be needed if the operational style of the classroom is to change. What is required is a long-range view that will aim at the preparation of health educators and other school personnel who can address themselves to this and other serious health problems.

There must also be cooperation and involvement of all other segments of the community in a joint effort with the school if the mounting trend of drug abuse is to be reversed. The closeness of the effort needed is a condition that both the school and the community organizations will find unfamiliar, but melding of community effort is essential if the common objectives are to be met.

The tasks described above will require significant, long-term financial support and commitment. They will also require wise, perceptive leadership from national and state levels. An effective program of broad-based education should produce significant results by the end of the decade.

Interdisciplinary Panel

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BALTIMORE COUNTY BOARD OF EDUCATION

Drug Abuse Education Program

1968-69

Prepared under the direction of

Benjamin P. Ebersole
Coordinator of Curriculum
Development

G. Alfred Helwig
Director of Curriculum and
Instructional Services

Anna G. Shepperd
Assistant Superintendent in
Charge of Instruction

Committee Members

James L. Miller, Chairman
Supervisor of Physical Education

Beatrice L. Wolcott
Supervisor of Nursing Services

Mary Ellen Saterlie
Curriculum Consultant

1967 Committee

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Sharon Cook
Wanda Greene
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Mary Tinder
J. Bruce Turner

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Peggy Blaine
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FOREWORD

Because of the growing concern in Baltimore County about the need for pupils to be informed about the broad aspects of health and safety as they apply to contemporary society, a Health and Safety Education committee was formed in the spring of 1967 to conduct a thorough K-12 study of the health education program in the schools. As an outgrowth of the committee's plans and because of expressed interest of individuals and community agencies, the first curriculum workshop was held in the summer of 1967 and focused on one aspect of health education -- drug abuse. The purpose of this workshop was to provide direction and suggestions for teaching about drugs during the 1967-68 school year.

The first steps taken by the workshop were to provide material and factual information for all schools to enable educators to become more informed about the problems of drug abuse.

Fifteen schools conducted pilot programs during the school year 1967-68. These programs were evaluated and the findings used as a guide for the 1968 summer workshop activities. The "Drug Abuse Information Kit" and the "Drug Abuse Resource Guide" were revised and updated. A simplified text on drug use and misuse was designed to be used at the lower reading levels.

A suggested teaching unit was developed for sixth grade. Existing units for grades nine and twelve were revised to include new resource material.

The Board of Education and the Superintendent wish to acknowledge their appreciation to the workshop participants and consultants. Members of the committee included science, social studies, and physical education teachers and representatives from the offices of nursing services, visiting teachers, school psychologists, and guidance. Science Coordinator Helen Hale and Social Studies Coordinator Josiah Blacklock helped in the identification of curriculum areas and in the preparation of activities. Consultants included Miss Doris Terry, Supervisor of Health Education, Maryland State Department of Education; Lt. Christian Kessler, Baltimore County Police Department (Retired); Mrs. Doris Wright, Director of Baltimore County Commission on Aging and Youth; Mr. Vincent Palacorolla, Sr., Adult Challenge; and other representatives of federal, state, and local educational, civic, and law enforcement groups.

As with any social problem, combating drug abuse requires the cooperation of the school, the home, and the community. It is hoped that these efforts of the Board of Education will help students to be better able to deal with this problem.

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POINT OF VIEW

The optimal development of a culture's most precious resource, its people, is the aim of the educational system. One of the most effective methods for achieving this optimal development is to provide an educational program which will help to make our students adequate and successful citizens. An important consideration is the recognition of the changing social conditions and the complexity of the individual decisions which accompany them. The Baltimore County school system consistently plans to provide appropriate learning experiences to enable the students to face these problems of concern.

One of the growing social concerns is the misuse of certain dangerous substances. Important in this area is the problem of drug abuse, ranging from self-medication and glue sniffing to drug addiction. Most students or adults will not become addicted, and information alone will not prevent those with unusual needs from possibly becoming victims. However, a better understanding about drugs on the part of the school staff and the students should make it possible for the individuals confronted with the problem of drug misuse to make more knowledgeable decisions.

Factual, accurate, and current information on the subject of drug abuse is essential to good teaching for school personnel. Therefore, suggested instructional units have been constructed.

Young people need facts and a positive approach to help them make sound decisions should they be faced with group and individual pressures to misuse drugs. Moralizing and threats of punishment have proved to have little influence on the potential drug user, and may even have the effect of provoking drug misuse.

No single effort or auditorium type presentation can be considered a substitute for a carefully planned educational program. Effective learning occurs when a wide variety of resources are utilized, and when teachers and students have many opportunities to study and discuss this problem at pertinent times.

GUIDELINE FOR IMPLEMENTATION

During the 1967-68 school year pilot studies in drug abuse education were conducted in five elementary school 6th grade classes, five junior high science-social studies classes, and five senior high 12th grade social studies classes. Based on the evaluation of these programs it is recommended that the program for 1968-69 extend to all 6th grades, all 9th grade science-social studies classes (also 7th and 8th grade experimental science programs), and all 12th grade social studies classes.

The 1968 summer workshop revised and updated the "Drug Abuse Teacher Information Kits," and "Drug Abuse Resource Guide." Kits and copies of the Resource Guide will be distributed as follows:

one copy of the guide for each 6th grade elementary school teacher

one copy of kit to elementary school libraries- 18 rooms and under

two copies of kit to elementary school libraries-19 to 24 rooms

three copies of kit to elementary school libraries-25 rooms and above

one copy of the information kit and guide for each 7th, 8th, and 9th grade science teacher in the experimental science program

one copy of the kit and guide for each 9th grade science and social studies teacher

one copy of the kit and guide for each 12th grade social studies teacher

All teachers are encouraged to become familiar with this material so they will be better prepared to answer pupil questions or carry on incidental teaching. Schools are also encouraged to plan department and faculty meetings for discussion on the topic of drug abuse.

Teachers who have been teaching about drug abuse are encouraged to continue this instruction and are requested to share their experiences with the Health and Safety Education Committee. Evaluation forms for this program are available in the information kits or from the Health Education Committee.

OVERVIEW OF THE USE OF SUGGESTED TEACHING ACTIVITIES

The suggestions which follow are designed to be used by teachers in programs on the sixth, ninth, and twelfth grade levels. The recommended activities do not constitute a total unit on any grade level. Rather, they provide examples of approaches and materials teachers may employ to develop short integrated teaching activities coordinated with units already in existence in science and social studies.

The units which were chosen to include drug abuse are "How Does Science Help to Prevent the Spread of Disease?" in the sixth grade, a combined plan in the ninth grade which utilizes the science unit entitled "Human Behavior" and the social studies unit entitled "Our Changing World," and a part of the twelfth grade Contemporary Issues and the Social Sciences program in social studies. The suggested activities overlap in some instances, and references to other grade levels will be made within the outlines. In addition, science teachers in 7th and 8th grades teaching the new pilot science programs will cover the subject of drug abuse.

These and other disciplines lend themselves in varying degrees to the development of drug abuse education in a number of units and at nearly every grade level. Although only three grade levels were selected, this does not preclude incidental or planned teaching on all levels.

The primary purpose of this material is to prepare students to make intelligent decisions regarding the misuse of potentially dangerous substances. To achieve this purpose one must appreciate the useful medical properties of drugs as well as their negative potential when misused. This appreciation is best achieved through an educational program based on an objective presentation of all applicable facts rather than preaching against, moralizing, or sensationalizing the topic.

The value of imparting knowledge on narcotics and dangerous drugs is to replace misinformation and half-truths with factual information concerning the effects of the use of these substances on the individual and his relationships with other people in his home and his community.

With a specific social problem such as drug abuse there is no single educational plan that will meet all learning situations. Educators on the instructional level who become acquainted with the subject of drug abuse will find that candor, flexibility, and situational perceptiveness are essential. Teachers should use their own resourcefulness and initiative in modifying the material to fit the maturity level of students and local needs.

An evaluation sheet is included at the end of this report. Teachers are asked to record successful and unsuccessful practices and forward these to the Office of Curriculum by the end of the month of May. Evaluations and suggestions will be utilized for continual revision of the Drug Abuse Educational Program.

CONTENT OUTLINE

The following outline of information on drug abuse may serve as a guide for teachers on all grade levels from 6 - 12. The needs, interests, and maturity of pupils should be the major factors in enabling the teacher to determine the depth or extent to which he wishes to develop his teaching experience.

I. Introduction

II. History of drug use

III. Drugs
  A. Basic terms
    1. Stimulants, depressants
    2. Hallucinogens, narcotics
    3. Addiction, habituation
    4. Physical and psychological dependence
    5. Tolerance
  B. Kinds of drugs
    1. Narcotics
      a. Opium
      b. Opium derivatives
        (1) Morphine
        (2) Heroin
        (3) Codeine
      c. Synthetic morphine-like drugs
        (1) Demerol
        (2) Methadone
      d. Preparations containing small quantities of opium derivatives
        (1) Paregoric
        (2) Cough syrup
    2. Hallucinogens
      a. Marihuana
      b. Peyote
      c. LSD
      d. DMT
      e. STP
    3. Stimulants
      a. Cocaine
      b. Benzedrine
      c. Dexedrine
      d. Methedrine
    4. Depressants
      a. Barbiturates
        (1) Nembutal
        (2) Deconal
        (3) Luminol
        (4) Amytal
      b. Non-barbiturate sedatives
        (1) Miltown and Equanil

            (2) Doriden
            (3) Librium
    C. Substitutes producing drug-like effects
        1. Glue
        2. Paint thinner
        3. Gasoline
        4. Cleaning fluid
        5. Acetone
        6. Lighter fluid

IV. Medical purposes of drugs
    A. Physiological relief
        1. Pain
        2. High blood pressure
        3. Diarrhea
    B. Psychotherapy
        1. Sedation
        2. Relief of mild depression and anxiety

V. Personal health
    A. Relation of drugs to physical and mental health
        1. Variations of effects
            a. With individual
            b. With drug
            c. With dosage
        2. Pathways to misuse
            a. Personality factors (the kind of people prone to use drugs)
                (1) Experimentation (curiosity, how it will affect sight, feeling, smell)
                (2) Kicks (for the pleasure involved)
                (3) Escape (for the relief from unpleasant situations)
            b. Accidental medical addiction
            c. Accidental addiction through experimentation
            d. Social pressure
                (1) To be "in" - one of the crowd
                (2) "Everyone else does it"
                (3) "A little bit won't hurt you"
    B. Methods of dealing with addicts
        1. Police arrest - jailing
        2. Therapy and rehabilitation
            a. Medical agencies (local, state, federal)
            b. Social agencies (local, state, federal)

VI. Social consequences of drug misuse
    A. Family relationships
    B. Group relationships
    C. Future careers
    D. Drop-out potential
    E. Financial demands (cost to individual and society)
    F. Delinquency and crime

VII. Legislative agencies related to drug misuse
    A. Agencies for drug control
    B. Laws related to drug control

VIII. Summary

SUGGESTIONS FOR GRADE SIX

The Social Living Program

Unit: How Does Science Help to Prevent the Spread of Disease?

This problem deals with the insights science has given man for understanding causes of disease and ways of preventing and combating it. It includes an historical review of the growth of medical knowledge and a study of personalities instrumental in its development. It covers inventions leading to the prevention or cure of disease and stresses the need for cooperation with health authorities in order to insure health. Many opportunities for teaching about drug use and abuse are inherent in this unit from the discovery of antibiotics to an understanding of the Food and Drug Administration and World Health Organization as means of providing safeguards for the use of drugs and hazardous substances.

Additional Concepts

Man has used drugs for many centuries for the control of mental and physical disease.

There is danger inherent in the use of all drugs since some valuable drugs can cause undesirable side effects.

Because the misuse of drugs can be harmful to physical and mental health, laws have been passed to control their manufacture and sale.

Expanded Scope

Pupils should become familiar with the historical background of drug use in order to gain an understanding of the value of drugs in the relief of pain and suffering as well as an understanding of the social changes that occurred as a result of man's use of drugs.

Emphasis should be placed upon the fact that the same drug which helps one person may have undesirable side effects upon another. For this reason pupils should be cautioned against the taking of any drug unless it is prescribed by a physician or recommended by a knowledgeable adult.

During the course of the unit the harmful effects of the intentional misuse of drugs should be stressed and attention directed to the legislative controls against drug abuse at the local, state, federal, and international level.

Grade 6 Drugs-Use and Misuse-"How Does Science Help Prevent the Spread of Disease?"

Content	Teaching Suggestions	References
I. Introduction A. Motivation	1. Construct bulletin board with appropriate title conveying the idea of effects of drugs used wisely and drugs misused. Leave space for children to complete bulletin board with current newspaper and magazine articles, posters, drug labels, and advertisements related to all drugs.	
B. Review of materials covered so far in unit	2. Review drugs, vaccines, etc., discussed in former part of unit. a. What are the drugs, vaccines, etc., that have aided man in preventing the spread of disease? b. Who are the persons who discovered or made these available to man? c. What are some of these drugs that can cause harm to the body if not used as prescribed?	
C. Parts of the body affected by drugs	3. Divide the class into groups to study the nervous system and the brain, the respiratory system, the circulatory system, and the digestive system. Study these systems in relation to the questions below. a. How do drugs get into the human body? b. How do drugs get into the different parts of the body? c. How does the body get rid of some drugs? (Also draw on 5th grade unit.) d. Why would the brain and nervous system be affected by drugs? e. Discuss persons who aided our understanding of these systems.	Children's References: 1. Encyclopedias 2. Transparencies 3. The Instructor Kit on The Human Body #4 The Nerves #5 The Brain #6 Circulation #7 Respiratory #8 Digestion 4. Booklet that accompanies The Instructor Kit on The Human Body
D. Drugs that harm the body	4. Give test to children as a pretest. Score and save for comparison under summary (post-testing).	Teacher Reference: Teacher Resource #2, "What Do You Know about Drugs?"

Content	Teaching Suggestions	References
II. History of drug use	5. Divide class into groups to study how man over the ages discovered the use of plants, leaves, herbs, barks, berries, nuts, etc. to produce drug effects for medical remedies, religious rites, and a substitute for a way of life. a. What uses did man make of these? b. How did it affect the people? c. What social changes came about because of the use of these? (i.e. caused war, used to relieve human miseries during war, way of life of people, made living easier) d. Draw conclusions as to how drugs are used universally and why in some places the use of drugs is not considered abuse but a way of life.	Teacher References: 1. Drug Abuse: Escape to Nowhere p. 15-25 2. Facts About Narcotics and Other Dangerous Drugs p. 5-10 3. Content Outline 4. Prevention and Control of Narcotic Addiction p. 1,9 Children's References: 1. Facts About Narcotics and Other Dangerous Drugs p. 5-10 2. Basic Text, (Drug Use and Misuse) 3. Encyclopedias 4. Life Nature Library- The Mountains p. 143
	6. Draw pictures to illustrate: a. Man using drugs in religious rites. b. Man using drugs from plants to ward off evil spirits as a cure for disease. c. Man using drugs to relieve man's discomfort (i.e. on the battle field in Civil War, and in operations, as an anesthetic).	
III. Drugs that have been abused A. Basic terms	7. Show filmstrip "Drug Misuse and Your Health." (Suggest using only frames 4-17 to begin a vocabulary list of basic terms and specific drugs.) a. What is a narcotic? b. What are some of the habit-forming drugs? c. What are the beneficial uses of narcotics?	Teacher Reference: 1. Teacher Resource #3, "Filmstrip Resume", Drug Misuse and Your Health 2. Teacher Resource #13, "Glossary of Technical and Slang Terms"

<table>
<tr><th>Content</th><th>Teaching Suggestions</th><th>References</th></tr>
<tr><td></td><td>d. What are some of the narcotics derived from opium?
e. Why must doctors use narcotics with discretion?</td><td>3. Drug Abuse and You, p. 9-12
Children's Reference:
1. Filmstrip:"Drug Misuse and Your Health,"SVE</td></tr>
<tr><td>B. Classification of drugs</td><td>8. Organize, with students, the specific drugs into the following categories:
<table>
<tr><th>Narcotics</th><th>Stimulants</th><th>Depressants</th><th>Halluc.</th></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table>
a. Discuss the differences between the above headings.
b. Discuss how some drugs would fit under more than one heading.
c. Include medical uses.
d. Discuss the way it affects the mind and body functions.</td><td>Teacher References:
1. "Drug Abuse: Escape to Nowhere" p. 27-43
2. Reference Chart-Content Outline
3. Teacher Resource #13, "Glossary of Technical and Slang Terms"
Children's Reference:
1. Facts About Narcotics and Other Dangerous Drugs p. 11-27
2. Basic Text, (Drug Use and Misuse)</td></tr>
<tr><td></td><td>9. Have the class organize into groups and ask each to select several drugs from the list to report to the class.
a. Origin of the drugs (i.e. from plants, synthetic, derived from another drug).
b. Description of drug in original form.
c. Form in which it is sold.
d. Medical use.
e. Effects on the mind and body systems.
f. Some slang commonly associated with drugs.</td><td>Teacher References:
1. Content Outline
2. Drug Abuse and You p. 13-21
3. Comprehensive Content Outline in Kit
Children's References:
1. Facts About Narcotics and Other Dangerous Drugs p. 11-27
2. Basic Text
3. Encyclopedias</td></tr>
</table>

<table>
<tr><th>Content</th><th>Teaching Suggestions</th><th>References</th></tr>
<tr><td></td><td>10. Begin chart with children:
Drugs That May Be Misused
<table><tr><th>Drug</th><th>Medical Use</th><th>Symptoms when Misused</th></tr><tr><td></td><td></td><td></td></tr></table>Draw on reports of children.</td><td></td></tr>
<tr><td></td><td>11. Show filmstrip "Narcotics and Health" 190D.
a. Use as a summary for drugs from the coca plant.
b. Why were substitutes developed?
c. What are the medical uses?
d. What happens when it is misused?
e. Using the above questions, discuss - marihuana, barbiturates, amphetamines, household substances producing drug-like effects, and LSD.
f. Fill in chart "Drugs That May Be Misused."</td><td>Filmstrip: "Narcotics and Health" 190 D Eye Gate House
Teacher Reference: Resource Sheet #3, Filmstrip Resume</td></tr>
<tr><td></td><td>12. Show filmstrip, "Narcotics: Background Information" 190 C.
a. Use as summary for opiate drugs.
b. Fill in chart "Drugs That May Be Misused."</td><td>Teacher Reference: Teacher Resource #3, Filmstrip Resume.
Children's Reference: Filmstrip: "Narcotics: Background Information," 190 C Eye Gate House</td></tr>
<tr><td>IV. Drug misuse and your health
A. Personal health</td><td>13. Make a display of empty medicine bottles and containers which still have labels on them.
a. Analyze terms used for drugs and amounts included.
b. Check for narcotic drugs.
c. Discuss use of drug for its intended use (i.e. for pain, for coughs).
d. Discuss recommended dosage.
e. Discuss precautions given.
f. Discuss dangers involved when directions are not followed.</td><td></td></tr>
</table>

Content	Teaching Suggestions	References
	14. Read from Facts About Narcotics and Other Dangerous Drugs and from the basic book for the following information: a. What health problems other than addiction can arise from drug abuse? b. What health problems arise from the actual addiction to specific drugs? c. What happens to the addict during withdrawal? d. What types of people may become addicted?	Children's References: 1. Facts About Narcotics and Other Dangerous Drugs p. 28-30 p. 35-41 2. Basic Text
	15. Show film Dangerous Drugs. Relate the use of drugs shown in the movie to the information already gathered.	Film: The Dangerous Drugs, Central Film Library Teacher Reference: Teacher Resource #5, "Film Guide"
	16. Introduce as a teacher demonstration The Properties and Uses of Solvents. a. Stress the fact that inhaling substances is just as dangerous as swallowing. b. Stress the fact that even though it is inhaled it can affect other parts of the body.	
	17. Make a collection of cans and bottles of household solvents and liquids. a. Stress symbols to denote poison. b. Stress precautions.	Teacher Reference: 1. Teacher Resource #16,"Suggestions for Demonstrating Some Properties of and Uses for Solvents" 2. Book: The Glue Sniffing Problem
	18. Show and discuss film Drugs and the Nervous System. Use guide questions suggested in "Film Resume."	Film: Drugs and the Nervous System, Central Film Library Teacher Reference: Teacher Resource #6, Film Guide

Content	Teaching Suggestions	References
	19. Show filmstrip "Drug Misuse and Your Health." a. Build vocabulary of words (habituation, addiction, emotional dependence, psychological dependence, physical dependence, "fix," pep pills, bennies, "kick," "reefer"). b. What are the physical and mental effects of addiction? c. What crimes come about because of addiction? d. What is the cost of addiction to society? e. What kinds of persons misuse drugs? f. What agencies help to prevent drug abuse or prevent drug misuse? g. What are some safety factors to follow to prevent drug misuse?	Filmstrip: Drug Misuse and Your Health, SVE Teacher Reference: Teacher Resource #3, "Filmstrip Resume"
B. Geographic distribution of narcotic addiction in the United States	20. Show transparency "The U.S. Cities Leading in Number of Active Narcotic Addicts as of Dec. 31, 1963." Show transparency "The Ten Leading Cities in Active Narcotic Addicts Reported in U.S. as of Dec. 31, 1966." a. Compare as to number. b. Locate as to section of country and city size. c. What are the changes of cities on the first 10 list?	Teacher Reference: Teacher Resource #24 Teacher Resource #25
	21. Show transparency "Active Narcotic Addicts Reported in Several States as of Dec. 31, 1966." a. Compare states with addicts to size of population. b. What cities in those states contribute to the number of addicts? c. Compare the number of addicts in the state with large cities in the state.	Teacher Reference: Teacher Resource #22
	22. Show transparency "Active Narcotic Addicts in the U.S. as of Dec. 31, 1966." a. Where are the greatest concentrations of drug addicts? Why? b. What states have the least number of addicts? Why? (i.e. population per state, rural areas, urban areas)	Teacher Reference: Teacher Resource #23

Content	Teaching Suggestions	References
	23. Show transparency "Active Narcotic Addicts in the U.S. as of Dec. 31, 1965 and Dec. 31, 1966, by State. a. Compare the active addicts to number of violators. Why is there a difference in figures? b. Where are most addicts? least addicts? Why? c. Compare with map (transparency #23).	Teacher Reference: Teacher resource #33
	24. Show transparency "New Narcotic Addicts Reported to the U.S. Bureau of Narcotics During the Calendar Years 1962-66. a. Compare Md. reported addicts with other states. b. Compare reported addicts of one year with another. (What is the trend in rise and decline according to years?) c. Draw some conclusions as to why there was a rise and decline.	Teacher Reference: Teacher resource #34
V. Social consequences of drug misuse	25. Show film, The Losers. Use the film guide resume.	Film: The Losers, Central Film Library Teacher Reference: Teacher resource #9, "Film Guide"
	26. Read Facts About Narcotics and Other Dangerous Drugs and Basic text for the following information: a. How can drug addiction affect family relationships or group relationships? b. What effect does drug abuse have on the financial demands to the user and to society? c. What effect does drug abuse have on crime and delinquency?	Children's Reference: 1. Facts About Narcotics and Other Dangerous Drugs, p.32-34 2. Basic Text 3. Newspapers
VI. Precautions taken by groups against drug misuse	27. Invite the school nurse to talk to the class about how drugs are protected from misuse in hospitals.	

Content	Teaching Suggestions	References
	28. Invite a local pharmacist to speak to the class about how drugs are protected in drug stores from misuse. Have him stress his directives written on prescriptions.	
VII. Agencies related to drug misuse A. What is done to help the addict	29. Read Facts About Narcotics and Other Dangerous Drugs and the Basic Text for the following information: a. Where can an addict get treatment? b. What steps are taken in withdrawing drugs from an addict? How does it affect the addict? c. What is done for the rehabilitation and reeducation of the addict?	Children's Reference: 1. Facts About Narcotics and Other Dangerous Drugs p. 42-49 2. Basic Text Teacher Reference: Drug Abuse: Escape to Nowhere, p. 45-65
B. Legislative agencies related to drug misuse	30. Read Facts About Narcotics and Other Dangerous Drugs and the Basic Text for the following information: a. What is being done on the local level? b. What is being done on the national level? c. What is being done on the state level? d. What is being done on the international level? e. Why must legislation be made on all levels?	Children's Reference: 1. Facts About Narcotics and Other Dangerous Drugs, p. 50-53 2. Basic Text 3. Newspapers Teacher Reference: 1. Traffic in Opium and Other Dangerous Drugs 2. Prevention and Control of Narcotic Addiction, p. 6-32 3. Drug Abuse: Escape to Nowhere p. 77-82 4. Interior Report Balto., Md. Commission to Study Problem of Drug Addiction 1966
VIII. Summary	31. Have children make posters to illustrate: a. Safe practices with home medicines. b. Safe practices with prescription medicines. c. Safe practices with dangerous substances (i.e. glue, gasoline, etc.).	

Content	Teaching Suggestions	References
	32. Give children the test "What Do You Know About Drugs?" as a post-test. a. Compare scores with pre-test. b. Compare how children's knowledge of drugs and attitudes toward drugs have changed.	Children's Reference: Teacher Resource #2, "What Do You Know About Drugs?"

SUGGESTIONS FOR GRADE NINE

Social Studies Unit: Our Changing World

Science Unit: Human Behavior

These two units, both taught to ninth graders in their social studies and science courses, contain multiple opportunities to integrate the social and scientific aspects of the use and misuse of drugs. "Our Changing World" is an introductory unit to point up characteristics and problems of contemporary society, the forces which are shaping it, and the importance of the individual as he relates to others and is responsible for himself. "Human Behavior" deals with man as the most complex living form. It includes an investigation of sense organs and nervous and endocrine systems and how they influence functions of the human being. It also introduces concepts related to the modification of behavior.

A social studies-science cooperative planning and team teaching approach is encouraged to provide increased depth in the area of drug abuse education.

Grade 9

Content	Teaching Suggestions	References
I. Introduction	1. Discover the existing knowledge and attitudes of the students by administering "What Do You Know About Drugs?" as a pre-test.	Teacher Reference: Teacher Resource #1, "What Do You Know About Drugs?" Teacher Resource #2, "What Do You Know About Drugs?" for basics.
	2. Prepare a question box so that the students may submit questions they would like to have answered about drugs and their uses and abuses. It is not necessary that the students sign their names to the questions. The results of this survey should have an important influence on the selection and organization of teaching activities.	
	3. Construct a bulletin board with the following title: Is Drug Misuse a Problem? Have the students fill the bulletin board with newspaper and magazine articles and pictures, posters, brochures, and advertisements related to drug abuse.	
	4. Use the bulletin board as a starting point for a discussion of such topics as law enforcement, social problems, individual reactions, dangers, influences of psychedelic experiences on popular art and music, and medical findings on the use and misuse of drugs.	
II. History of drug use	5. Divide the class into groups to trace the history of drug uses and abuses through the ages. Groups may be assigned study on the basis of historical eras (i.e. colonial period, Civil War) or geographical areas (i.e. China, tropical Latin America).	Teacher Reference: Drug Abuse: Escape to Nowhere, p.15-25. History of Drug Abuse, Reprint in Kit.

Grade 9

<table>
<tr><th>Content</th><th>Teaching Suggestions</th><th>References</th></tr>
<tr><td></td><td>Reports should include such information as names of drugs, their sources, dates of discovery, uses and misuses, related problems. Have the class draw conclusions about the universality of the problems of drug abuse.</td><td>Student References:
Facts About Narcotics and Other Dangerous Drugs, p. 5-10.
Basic Text
Encyclopedias</td></tr>
<tr><td>III. Drugs
A. Basic terms</td><td>6. Ask the students to list as many words that they can think of that are related to drugs. Write the list on the board.</td><td></td></tr>
<tr><td></td><td>7. Show the filmstrip "Narcotics: Background Information" (suggest using only frames 4-17) to begin a vocabulary list of basic terms and specific drugs. Discuss the following questions:
a. What is a narcotic?
b. Name some habit-forming drugs.
c. What are some beneficial uses of narcotics?
d. What are some of the narcotics derived from opium?
e. Why must doctors use narcotics sparingly?</td><td>Filmstrip: "Narcotics: Background Information", 190-C, Eye Gate House.

Teacher Reference:
Teacher Resource #3, "Filmstrip Resume"</td></tr>
<tr><td>B. Kinds of drugs</td><td>8. Continue the vocabulary list after having the students organize the names of specific drugs into the following categories:
<table><tr><th>Narcotics</th><th>Stimulants</th><th>Sedatives</th><th>Halluc.</th></tr></table>Discuss the differences among these four categories of drugs. Include medical uses and effects on the body and mind.
Give students a copy of the Teacher Resource # 13 "Glossary of Technical and Slang Terms" to use as an aid.</td><td>Teacher References:
Drug Abuse: Escape to Nowhere, p. 27-43

Reference Chart
Content Outline III B 1-4

Look Magazine Reprint, p. 13

Drugs of Abuse-reprint in Kit

Student Reference:
Facts About Narcotics and Other Dangerous Drugs, p. 11-27
Basic Text
Teacher Resource #13, "Glossary of Technical and Slang Terms"</td></tr>
</table>

Content	Teaching Suggestions	References
	9. Have the class organize itself into four or five groups and ask each to select several drugs from the list for study and reporting to the class. Reports should include the following information: a. Origin of the drug (i.e. plant, synthetic, derivative of another drug) b. Description of the drug in original form c. Form in which it is sold d. Medical use e. Physical and psychological effects f. Slang names commonly associated with the drug. After the findings are presented, have the students write a paper entitled "The Awesome Potential of Drugs."	
C. Substitutes producing drug-like effects	10. Have the students list common medicines and substitutes having drug-like effects which can produce harmful physical and psychological effects if misused. Place them in the proper category on the chart. Have the students bring in news articles or cite actual cases in which individual were harmed by the misuse of seemingly harmless substances.	Teacher Reference: Drug Abuse: Escape to Nowhere, p. 27-43 Student Reference: Facts About Narcotics and Other Dangerous Drugs, p. 11-27 Basic Text
IV. Medical purposes of drugs	11. Invite a pharmacist to speak to the class about dispensing prescriptions and the regulatory measures by which he must abide.	
	12. Show the filmstrip "Narcotics and Health." Point out the medicinal purposes of drugs. Note: Concentrate on frames 7, 8, 12, 13, 14, 23, 24, 27, 28, 29, 30, 34, 37, 38, 39, 40.	Filmstrip: "Narcotics and Health," 190-D, Eye Gate House Teacher Reference: Teacher Resource #3, "Filmstrip Resumé"

Grade 9

Content	Teaching Suggestions	References
V. Personal health	13. Make a display of empty medicine bottles and containers which still have the labels on them. Analyze the contents in terms of the kinds and amounts of drugs included in each. Make a series of graphs to illustrate the composition of several common medicines. a. Discuss each medicine as to its intended use: i.e. for pain, for coughing b. Discuss proper use of prescription and non-prescription drugs with special attention to recommended dosage.	
	14. Show the film The Dangerous Drugs. Relate the use of drugs shown in the movie to the information the students have already gathered.	Film: The Dangerous Drugs, Central Film Library
	15. Introduce as a teacher demonstration or as a student lab activity the glue sniffing experiment and/or for a student lab activity, "The Properties and Uses of Solvents"	Teacher Reference: Teacher Resource #15, "Suggestions for Glue Sniffing Experiment" Teacher Resource #16, "Suggestions for Demonstrating Some Properties of and Uses for Solvents"
	16. Use a directed reading activity to have the students gain additional information on how drug addiction or misuse harms the body. Recent magazine articles and materials included in the instructional kit may be used.	Student Reference: Facts About Narcotics and Other Dangerous Drugs, p. 28-30 Basic Text

Content	Teaching Suggestions	References
	17. Show and discuss the film *Drugs and the Nervous System*. Point out in the discussion how this film lets the viewer almost experience the influence of drugs through use of color and sound. Have the members of the class bring in records, pictures, and posters which illustrate attempts at translating effects of drugs in some forms of music, art, and cinema.	Film: *Drugs and the Nervous System*, Central Film Library *Teacher Reference*: Teacher Resource #6, "Film Guide"
	18. Show the filmstrip "Drug Misuse and Your Health." Note: Do not play the record the first time through the filmstrip. a. Have the students write captions for the frames. b. Discuss the students' captions. c. Show the filmstrip again, this time accompanied by the record.	Filmstrip: "Drug Misuse and Your Health," SVE *Teacher Reference*: Teacher Resource #3, "Filmstrip Resume"
VI. Social consequences of drug misuse	19. Have the students read *Facts About Narcotics and Other Dangerous Drugs* as well as articles in magazines and statements by psychologists, addicts, physicians, and others to consider what the attraction to drug misuse and addiction is. Have a panel discussion in which the information is presented to the class and provide opportunities for challenges by panel members and the class.	Student Reference: *Facts About Narcotics and Other Dangerous Drugs*, p. 35-41
	20. Show the film *Hooked* or *The Losers*. Discuss some of the reasons why these young people became addicts. Note: Special attention may be called to the type of individual being interviewed. What are some of the effects of drug addiction?	Film: *Hooked*, Central Film Library *Teacher Reference*: Teacher Resource #8 "Film Guide" Film: *The Losers*, Central Film Library

Grade 9

<table>
<tr><th>Content</th><th>Teaching Suggestions</th><th>References</th></tr>
<tr><td></td><td></td><td>Teacher Reference: Teacher Resource #9, "Film Guide"

Student Reference: Facts About Narcotics and Other Dangerous Drugs, p. 32-34</td></tr>
<tr><td></td><td>21. Invite the school nurse to talk to the class about medical and social agencies on the federal, state, and local level that provide therapy and rehabilitation services. The nurse should be provided with a predetermined list of questions that the class may want answered as a result of preceding activities. The teacher reference Drug Abuse: Escape to Nowhere may be useful to the nurse.</td><td>Drug Abuse: Escape to Nowhere, p. 45-53

Student Reference: Facts About Narcotics and Other Dangerous Drugs, p.42-56

Basic Text</td></tr>
<tr><td>VII. Legislative agencies related to drug misuse</td><td>22. Have the students prepare a chart listing the address or location and function of the following organizations: World Health Organization, Federal Bureau of Narcotics, Bureau of Drug Abuse Control, U. S. Public Health Service, American Medical Association.
a. Prepare a ditto sheet with the agencies listed:
<table>
<tr><th>Organization</th><th>Address or Location</th><th>Function</th></tr>
<tr><td>1. World Health Organization</td><td></td><td></td></tr>
</table>
b. Assign one student to obtain information on the state and local agencies. The booklet entitled Maryland Commission to Study Problems of Drug Addiction (January 1966) may be used.</td><td>Teacher Reference: Drug Abuse: Escape to Nowhere, p.61, 71-84

Student Reference: Fact sheets 1-7 from Bureau of Narcotics & Dangerous Drugs (duplicate in quantity)
Facts About Narcotics and Other Dangerous Drugs, p.50-52
Basic Text</td></tr>
</table>

Content	Teaching Suggestions	References
	23. Invite a lawyer to discuss the various laws related to drug control and their effectiveness.	Teacher Reference: Teacher Resource #14, "Narcotics Control Legislation"
	24. Show selected transparencies #22 - #35. Choose transparencies to show how addiction has changed or progressed in the United States. Divide the students into groups, giving each group a selection of *transparencies to use.*	Teacher References: Transparencies #22-#35
	25. Have a panel discussion answering the following question: What changes would you make in the present laws or what new laws would you make to control more effectively the misuse of drugs and other dangerous substances? Why? Each group can use statistics from the transparenies as data in their answers.	
	26. Give students references #18 and #19, word and sentence puzzles as a review of vocabulary and as a review of the unit. Have ditto masters made so these exercises can be placed in the hands of the students.	Teacher and Student References: #17 - #20
	27. Give the students #17 and #20 as a review exercise. Have these exercises duplicated so each student may have a copy of each.	
	28. Have the students write a short account of a situation in which they might be introduced to drugs. a. Read some of their situations aloud and discuss each. b. Have the students role play some of the suggestions to show how they might deal with situations in which habit-forming drugs are offered.	

Content	Teaching Suggestions	References
	29. Have the pupils take the test "What Do You Know About Drugs?" as a post test. This can serve as a measure for gained awareness and changed attitudes.	Teacher References #1 and #2

SUGGESTIONS FOR GRADE TWELVE

Contemporary Issues and the Social Sciences

The twelfth grade social studies curriculum, Contemporary Issues and the Social Sciences, provides excellent opportunities for the teaching of drug abuse education. Part I, "The Challenge of National Issues," includes categories on meeting social needs, promoting the general welfare, and conflicts between traditional beliefs and contemporary actions. Each of these issues contains implications for the study of the use and abuse of drugs.

In Part II, teachers may use each of the five social sciences (psychology, sociology, economics, political science, anthropology) and philosophy to some extent as tools in considering the issue of drug abuse.

Grade 12

Content	Teaching Suggestions	References
I. Introduction	1. Discover the existing knowledge and attitudes of the students by administering "What Do You Know About Drugs?" as a pre-test.	Teacher Reference: Teacher Resource #1, "What Do You Know About Drugs?"
	2. Prepare a question box so that the students may submit questions they would like to have answered about drugs and their uses and abuses. It is not necessary that the students sign their names to the questions. The results of this survey should have an important influence on the selection and organization of teaching activities.	Teacher Resource #2, "What Do You Know About Drugs?" Basic Text
	3. Construct a bulletin board with the following title: "The Choice Is Yours; What Will You Do?" Have the students fill the bulletin board with newspaper and magazine articles and pictures, posters, brochures, and advertisements related to drug abuse.	
	4. Use the bulletin board as a starting point for a discussion of such topics as law enforcement, social problems, individual reactions, dangers, influences of psychedelic experiences on popular art and music, and medical findings on the use and misuse of drugs.	
	5. Reinforce concepts about social problems and law enforcement procedures by showing the following transparencies: "Ten U. S. Cities Leading in Narcotic Addiction as of Dec. 31, 1963" and "Ten U. S. Cities Leading in Narcotic Addiction as of Dec. 31, 1966." What implications do these statistics have for people living in the Baltimore metropolitan area?	Teacher Reference: Teacher Resource #24 Teacher Resource #25

Content	Teaching Suggestions	References
	6. Have the class identify five social problems (include the misuse of drugs). Discuss them in terms of: a. What constitutes a social problem? b. Why are social problems difficult to solve? c. What is the most realistic way to go about solving them? Use the guide sheet "Social Problems" to corroborate the conclusions of the class. On the basis of this discussion, have the class plan an organized way of studying the problem of drug use and abuse.	Teacher Reference: Teacher Resource #21, "Social Problems"
II. History of drug use	1. Divide the class into groups to trace the history of drug uses and abuses through the ages. Groups may be assigned study on the basis of historical eras (i.e. colonial period, Civil War) or geographical areas (i.e. China, tropical Latin America). Reports should include such information as names of drugs, their sources, dates of discovery, uses and misuses, related problems. Have the class draw conclusions about the universality of the problems of drug abuse.	Teacher Reference: *Drug Abuse: Escape to Nowhere*, p.15-25 Student References: *Facts About Narcotics and Other Dangerous Drugs*, p. 5-10 Basic Text Encyclopedias
III. Drugs A. Basic terms	1. Ask the students to list as many words that they can think of that are related to drugs. Write the list on the board.	
	2. Show the filmstrip "Narcotics: Background Information"(suggest using only frames 4-17) to begin a vocabulary list of basic terms and specific drugs. Discuss the following questions:	Filmstrip: "Narcotics: Background Information," 190-C, Eye Gate House

Grade 12

Content	Teaching Suggestions	References
	a. What is a narcotic? b. Name some habit-forming drugs. c. What are some beneficial uses of narcotics? d. What are some of the narcotics derived from opium? e. Why must doctors use narcotics sparingly?	Teacher Reference: Teacher Resource #3, "Filmstrip Resumé"
B. Kinds of drugs	3. Continue the vocabulary list after having the students organize the names of specific drugs into the following categories: Narcotics | Stimulants | Depressant | Halluc. Discuss the differences among these four categories of drugs. Include medical uses and effects on the body and mind. Give students a copy of the Teacher Resource #13, "Glossary of Technical and Slang Terms," to use as an aid.	Teacher Reference: Drug Abuse: Escape to Nowhere, p. 27-43 Reference Chart Content Outline III B 1-4 Look Magazine Reprint, p. 13 Student Reference: Facts About Narcotics and Other Dangerous Drugs, p. 11-27 Drugs of Abuse Reprint in Kit Basic Text Teacher Resource #13, "Glossary of Technical and Slang Terms"
	4. Have the class organize itself into four or five groups and ask each to select several drugs from the list for study and reporting to the class. Reports should include the following information: a. Origin of the drug (i.e. plant, synthetic, derivative of another drug) b. Description of the drug in original form c. Form in which it is sold d. Medical use	

Content	Teaching Suggestion	References
	e. Physical and psychological effects f. Slang names commonly associated with the drug. After the findings are presented, have the students write a paper entitled "The Awesome Potential of Drugs."	
C. Substitutes producing drug-like effects	5. Have the students list common medicines and substitutes having drug-like effects which can produce harmful physical and psychological effects if misused. Place them in the proper category on the chart. Have the students bring in news articles or cite actual cases in which individuals were harmed by the misuse of seemingly harmless substances.	Teacher Reference: Drug Abuse: Escape to Nowhere, p. 27-43 Student Reference: 1. Facts About Narcotics and Other Dangerous Drugs, p.27-43 2. Basic Text
IV. Medical purposes of drugs	1. Invite a pharmacist to speak to the class about dispensing prescriptions and the regulatory measures by which he must abide.	
	2. Show the filmstrip "Narcotics and Health." Point out the medicinal purposes of drugs. Note: Concentrate on frames 7, 8, 12, 13, 14, 23, 24, 27, 28, 29, 30, 34, 37, 38, 39, 40.	Filmstrip: "Narcotics and Health," 190-D, Eye Gate House Teacher Reference: Teacher Resource #3, "Filmstrip Resumé"
	3. Play the tape "Forum Focus on LSD." This tape was made on May 10, 1967 at a student forum at Woodlawn Senior High School. Mr. Sidney Wolf, a research psychologist from Spring Grove, and Mr. Jack Bologna from the Bureau of Drug Abuse Control (Branch of Food and Drug Administration) were guest speakers at the forum.	Reference: Tape "Forum Focus on LSD," Wolfe and Bellona, located in your high school library Teacher Reference: Teacher Resource #40A, Tape Summary

Content	Teaching Suggestions	References
	Put guide questions for the tape on the blackboard or duplicate them for the students to answer as they are listening to the tape. In the discussion following the tape, the students may want to add to the remarks of the speakers more recent medical findings from magazine and newspaper articles.	Teacher Reference: Teacher Resource #40B Teacher Guide Questions
V. Personal health	1. Show the film *The Dangerous Drugs*. Relate the use of drugs shown in the movie to the information the students have already gathered.	Film: *The Dangerous Drugs*, Central Film Library Teacher Reference: Teacher Resource #5, "Film Resumé"
	2. Introduce as a teacher demonstration or as a student lab activity the glue sniffing experiment., and/or for student lab activities, "The Properties and Uses of Solvents."	Teacher Reference: Teacher Resource #15, "Suggestions for Glue Sniffing Experiment" *The Glue Sniffing Problem* Teacher Resource #16, "Suggestions for Demonstrating Some Properties and Uses for Solvents"
	3. Use a directed reading activity to have the students gain additional information on how drug addiction or misuse harms the body. Recent magazine articles and materials included in the instructional kit. may be used.	Student Reference: *Facts About Narcotics and Other Dangerous Drugs*, p. 28-30 Basic Text
	4. Show and discuss the film *Drugs and the Nervous System*. Point out in the discussion how this film lets the viewer almost experience the influence of drugs through use of color and sound. Have the members of the class bring in records,	Film: *Drugs and the Nervous System*, Central Film Library

Content	Teaching Suggestions	References
	pictures, and posters which illustrate attempts at translating effects of drugs in some forms of music, art, and cinema.	Teacher Reference: Teacher Resource #6, "Film Guides"
	5. Show filmstrip "Drug Misuse and Your Health." a. Build vocabulary of words (habituation, addiction, emotional dependence, psychological dependence, physical dependence, "fix," pep pills, bennies, "kick," "reefer." b. What are the physical and mental effects of addiction? c. What kinds of persons misuse drugs? d. What agencies help to prevent drug abuse or prevent drug misuse? e. What are some safety factors to follow to prevent drug misuse?	Filmstrip: "Drug Misuse and Your Health," SVE
VI. Social consequences of drug misuse	1. Have the students read Facts About Narcotics and Other Dangerous Drugs as well as articles in magazines and statements by psychologists, addicts, physicians, and others to consider what the attraction to drug misuse and addiction is. Have a panel discussion in which the information is presented to the class and provide opportunities for challenges by panel members and the class.	Student Reference: Facts About Narcotics and Other Dangerous Drugs, p. 35-41
	2. Show the film Hooked or The Losers. Discuss some of the reasons why these young people became addicts. Note: Special attention may be called to the type of individual being interviewed. What are some of the effects of drug addiction?	Film: Hooked, Central Film Library Teacher Reference: Teacher Resource #8 "Film Guide" Student Reference: Facts About Narcotics and Other Dangerous Drugs, p. 32-34

Content	Teaching Suggestions	References
		Film: The Losers Central Film Library Teacher References: Teacher Resource #9 "Film Guide"
	3. Invite the school nurse to talk to the class about medical and social agencies on the federal, state, and local level that provide therapy and rehabilitation services. The nurse should be provided with a predetermined list of questions that the class may want answered as a result of preceding activities. The teacher reference Drug Abuse: Escape to Nowhere may be useful to the nurse.	Drug Abuse: Escape to Nowhere, p. 45-53 Student Reference: Facts About Narcotics and Other Dangerous Drugs, p. 42-56. Basic Text
	4. Direct a pair of students to take each of the following areas of social consequence: a. Family relationships b. Group relationships c. Future careers d. Dropout potential e. Financial demands f. Delinquency and crime After looking up information, they might participate in a student seminar pointing up positive and negative consequences of drug misuse in each area.	Teacher Reference: Ausubel, Drug Addiction Chein, Road to H, Narcotics, Delinquency, and Social Policy
	5. Invite a former addict to describe how his experience with drugs affected his family relationships, future career, and peer relationships. Note: Teachers should use extreme care in their choice for this type of dialogue.	
	6. Both in the light of increased unwitting misuse and deliberate abuse of drugs, it might be well to consider briefly the following questions:	Teacher Reference: Lin-Fu, Neonatal Narcotic Addiction

Grade 12

Content	Teaching Suggestions	References
	a. What are the health problems of addicted pregnant women? b. What are the problems of infants with neonatal narcotic addiction? c. How is the narcotic withdrawal syndrome managed in newborns? d. What are the difficulties in doing long range planning for the infant?	Film: Narcotics, A Challenge, Central Film Library Teacher Reference: Teacher Resource #11 Film Guide
	7. Play the tape entitled "Talk on Drug Addiction" by Mr. Gerald Siegel, Chairman of the Maryland Commission to Study Problems of Drug Addiction, who spoke to a social studies class at Woodlawn Senior High School in 1967.	Tape: "Talk on Drug Addiction" by Gerald Siegel located in your high school library
		Teacher Reference: Teacher Resource #39A Tape Summary
	Put guide questions for the tape on the blackboard or duplicate them for the students to answer as they are listening to the tape.	Teacher Resource #39A Teacher Guide Questions
	8. Work with a small group of selected students and have them present a panel discussion in which they bring out the following ideas: a. Our success in treating drug addiction leaves something to be desired. b. The reasons for this lack of success probably lie in the approaches we have taken. c. We have a public health model for treating various similar types of disease. d. What is "The Community Mental Health Approach to Diagnosis"? e. What are the "Targets, Goals, and Methods for Intervention" in The Community Mental Health Approach to Diagnosis?	Teacher Reference: A Community Mental Health Approach to Drug Addiction Teacher Resources: #21 Printed Original - "Social Problems" #37 Printed Original - "Graphic Representation of the Overall Social-Problem Field of Narcotic Addiction" Student References: A Community Mental Health Approach to Drug Addiction Chapts. 3 and 4

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<td>VII. Legislative agencies related to drug misuse</td>
<td>1. Have the students prepare a chart listing the address or location and function of the following organizations: World Health Organization, Federal Bureau of Narcotics, Bureau of Narcotics & Dangerous Drugs, U.S. Public Health Service, American Medical Association.
a. Prepare a ditto sheet with the agencies listed:
<table>
<tr><th>Organization</th><th>Address or Location</th><th>Function</th></tr>
<tr><td>1. World Health Organiz.</td><td></td><td></td></tr>
</table>
b. Assign one student to obtain information on the state and local agencies. The booklet entitled Maryland Commission to Study Problems of Drug Addiction (January 1966) may be borrowed from the public library and used.</td>
<td>Teacher Reference: Drug Abuse: Escape to Nowhere, p. 61, 71-84
Student Reference: Fact sheets 1-7 from Bureau of Drug Abuse Control (duplicate in quantity)
Basic Text
Student Reference: Facts About Narcotics and Other Dangerous Drugs, p. 50-52</td>
</tr>
<tr>
<td></td>
<td>2. Invite a lawyer to discuss the various laws related to drug control and their effectiveness.</td>
<td>Teacher Reference: Teacher Resource #14, "Narcotics Control Legislation"</td>
</tr>
<tr>
<td></td>
<td>3. Have the students participate in a group discussion answering the following question: What changes would you make in the present laws or what new laws would you make to control more effectively the misuse of drugs and other dangerous substances? Why?</td>
<td>Teacher References:
1. "The Addict and the Law" by Alfred Lindesmith
2. Drugs on the College Campus Ch. 4 "Drugs and the Law" p. 31-44</td>
</tr>
</table>

Content	Teaching Suggestions	References
	If and when appropriate during the discussion show transparencies entitled: Teacher Resource #23 - Printed Original - "Active Narcotic Addicts Reported in Several Selected States as of Dec. 31, 1966" Teacher Resource #24 - Printed Original - "Ten U.S. Cities Leading in Number of Active Narcotic Addicts as of Dec. 31, 1963" Teacher Resource #25 - Printed Original - "Ten Leading Cities in Active Narcotic Addicts Reported in the U.S. as of Dec. 31, 1966" Teacher Resource #26 - Printed Original - "Active Narcotic Addicts in the U.S. as of Dec. 31, 1966" Teacher Resource #27 - Printed Original - "Age of Active Narcotic Addicts as of Dec. 31, 1966 in the U.S." Teacher Resource #28 - Printed Original - "Average Length of Narcotic Sentences in U.S. District Courts" Teacher Resource #29 - Printed Original - "New Narcotic Addicts Reported to the U.S. Bureau of Narcotics During the Calendar Years 1953-1966" Teacher Resource #30 - Printed Original - "Active Narcotic Addicts in the U.S. Under 21 Years of Age as of Dec. 31, 1966" Teacher Resource #31 - Printed Original - "Active Narcotic Addicts as of Dec. 31, 1966" Teacher Resource #32A - Printed Original - "Yearly Production and Use of the Principal Narcotic Drugs, 1960-1966" Teacher Resource #32B - Printed Original - "Yearly Production and Use of the Principal Narcotic Drugs, 1960-1966"	Teacher Reference: Teacher Resources #23, #24, #25, #26, #27, #28, #29, #30, #31, #33, #34, #35, #36, #37

Grade 12

Content	Teaching Suggestions	References
	The assumptions underlying and implicit in Federal law raise a number of broad social issues, issues which extend, in many instances, far beyond the drug problem. They are of concern not only to those students who do use drugs but also to those who are involved with any of a variety of current social issues, such as Vietnam, the draft, civil rights, student rights. It is appropriate here only to identify some of these issues and to underline the fact that many of them are not peculiar to the drug problem. Some of these issues have been identified by Blum: Does a person have the right to choose to use a powerful drug to seek some personal or social purpose when there is no approved medical reason for what he does? May a man seek pleasure through means disapproved as long as no one else is harmed? May he play while others work?	**Teacher Reference:** Blum, R.H., "Drugs, Dangerous Behavior, and Social Policy." Rosenthal, M.P., "Proposals for Dangerous Drug Legislation." *Task Force Report: Narcotiics and Drug Abuse* The President's Commission on Law Enforcement and the Administration of Justice, p.66-68. Blum,R.H.,Utopiates, New York:Atherton Press, 1964. NASPA Drug Education Project
VIII. Summary	1. Play the tape entitled "Narcotics" in which Dr. William Tuemmler, chemist for the Food, Drug, and Machinery Company, describes the effects of drugs on the nervous system and the causes and cures of addiction. Make up Guide questions for students. 2. Have the students write a short account of a situation in which they might be introduced to drugs. a. Read some of their situations aloud and discuss each. b. Have the students role play some of the suggestions to show how they might deal with situations in which habit-forming drugs are offered.	Reference: Teacher Resource #50, Tape "Narcotics"

Content	Teaching Suggestions	References
	3. Using a projection into the future ten years from now, have a group of students discuss: a. Their present occupational, financial, and marital status b. Their accomplishments in life c. Their analysis of their attitudes toward drugs at age eighteen d. Their feelings about the use of drugs by their own children. Hopefully, the view from a level of greater maturity will create a more thoughtful outlook on the consequences of drug use for the generation that mistrusts people who are over thirty.	
	4. Using the following data, and any other available supportive data, attempt to pull from the students generalizations of the following seven distinctive trends:	Teacher Reference: The Control and Treatment of Narcotic Use p. 7-9
	Trend one: An increase in involvement with addicting drugs by young persons (as indicated by the increase in persons under 18 among narcotics arrestees, and decrease in persons over 40). "What is happening to the rate of addiction among younger persons?"	A Community Mental Health Approach to Drug Addiction p. 8-14 Reference: Teacher Resources: #27, #30, #46, #47, #48 (Printed Originals)
	Trend two: An increase in the extent to which drugs are used by persons of the lowest economic status	Teacher Resources: #26, #47, #49
	Trend three: A concentration of drug usage in persons of minority racial and nationality groups	Teacher Resources: #26, #30, #47, #49

Grade 12

Contents	Teaching Suggestions	References
	Trend four: An increase in concentration in large cities	Teacher Resources: #22, #23, #31, #44, #46, #24, #25
	Trend five: The widespread linkage of different types of drug use	Drugs on the College Campus p. 17 and Chapter VI "Selected Drugs"
	Trend six: The increased association of drug addiction with other types of criminality	Newspapers Readings in Juvenile Delinquency Chapt. 21 "Narcotics Use Among Juveniles" p. 237-252
	Recall information for appropriate guide questions for any of these films: "Dangerous Drugs" "The Losers" "Narcotics, Why Not?"	Teacher Resource #5, Film Guide Teacher Resource #9 Film Guide Teacher Resource #12 Film Guide Student References: Accelerated: Drug Abuse: Escape to Nowhere Average: Facts About Narcotics and Other Dangerous Drugs Basic Text
	Trend seven: Especially prominent in the sixties is the use of new types of drugs (large variety of pills, including new and dangerous drugs, LSD and other hallucinogenic drugs, and the glue-sniffing fad among juveniles)	Drugs on the College Campus p. 17 and Chapt. VI Student references: Accelerated: Drug Abuse: Escape to Nowhere Average: Facts About Narcotics and Other Dangerous Drugs Basic Text

Content	Teaching Suggestions	References
	5. Give basic students word puzzle #18 and sentence puzzle #19 as a review of the unit. Have ditto masters made so these exercises can be placed in the hands of the students. N.B.: REMOVE THE HEADING "Basic and 6th grade" from the students' copies.	Teaching Reference: Teacher resource #18, #19 (including keys) Student Reference: Teacher resource #18 (minus key) #19 (minus key)
	6. Give students "Matching Definitions and Terms" as a review exercise. Have these exercises duplicated so each student may have a copy.	Teaching Reference: Teacher Resource #20 (including key) Student reference: #20 (minus key)
	7. Have the pupils take the test "What Do You Know About Drugs?" as a post test. This can serve as a measure for gained awareness and changed attitudes, and the results would be valuable as a part of the record on the Evaluation Sheet.	Teacher Resource #1, "What Do You Know About Drugs?" Teacher Resource #2 for Basics

TEACHER RESOURCE INFORMATION

Included within this section of the bulletin are several printed originals. These may be made into transparencies and ditto masters or they may be used in the opaque projector.

Teacher Resource # 1

WHAT DO YOU KNOW ABOUT DRUGS

What do you know about drugs?

What follows will help you to answer this question. The first part deals with facts and the second with attitudes and opinion.

PART I

True - False

F 1. Marihuana is used in medicine as a pain killer.

T 2. When a person has developed a tolerance to a drug, he needs increasing amounts of that drug in order to react satisfactorily to its presence.

F 3. The term "drug" refers only to materials used as medicine.

T 4. Amphetamine, when self-administered to prevent sleepiness while driving, may cause intoxication and affect driver control.

T 5. Barbiturates, taken in excessive amounts, cause a severe depression of the central nervous system which may result in unconsciousness or death.

F 6. When alcohol and barbiturates are taken together they neutralize each other, causing only a mild reaction.

F 7. Amphetamine may be self-administered with relative safety, because it does not lead to drug dependence.

F 8. The youth who abuses dangerous drugs is likely already to have a history of delinquent behavior.

T 9. The organic solvents present in glues and plastic cements are capable of damaging the brain, affecting liver and kidney functions, and interfering with the blood-forming function of the bone marrow.

F 10. There is no evidence that glue sniffing leads to the development of dependence on this material.

T 11. Marihuana is a contraband drug and whoever produces or distributes it is breaking the law.

T 12. The plant from which marihuana is derived has been known and used for several thousand years.

F 13. If other people are using marihuana (or some other drug), it is best for you to use it, too, so as not to appear different.

T 14. A person who forms the habit of marihuana use may find it very difficult to break the habit.

T 15. Hallucinations experienced after a person has taken LSD can recur several months later even though he has not taken any more of the drug.

F 16. Physicians prescribe LSD for persons who have symptoms of anxiety and depression.

T 17. LSD is one of the most potent drugs known to man.

F 18. LSD is a relatively mild drug which can be used safely in large amounts.

T 19. Involvement in narcotic use, if it occurs, is likely to take place only after prior experience with other drugs.

F 20. Heroin is legally used in the United States today as a medicinal drug.

T 21. The process of injecting heroin (or any other substance) directly into the veins carries serious dangers of infection.

T 22. The use of heroin leads rapidly and almost inevitably to total drug dependence.

F 23. Narcotic dependence may be said to be cured when a person has been relieved of the physical aspects of dependence.

T 24. The United States has made significant progress in international narcotic control.

Multiple Choice

(c) 1. The term "narcotic" is used medically in reference to (a) marihuana; (b) the barbiturates; (c) opiates; (d) hallucinogens; or (e) the hypnotics.

(b) 2. Substances which depress body functions are (a) barbiturates and amphetamines; (b) barbiturates and opiates; (c) amphetamines and opiates; (d) cocaine and marihuana; (e) amphetamines and cocaine.

(e) 3. Substances which stimulate body functions are (a) barbiturates and amphetamines; (b) barbiturates and opiates; (c) amphetamines and opiates; (d) cocaine and marihuana; or (e) amphetamines and cocaine.

(a) 4. "A generalized feeling of well-being in the absence of any objective justification for such a feeling" is a definition of (a) euphoria; (b) tolerance; (c) analgesia; (d) dependence; or (e) hallucination.

(e) 5. From among various claims which have been made for the usefulness of amphetamine, one of the following is valid: (a) it improves motor performance; (b) it improves mental performance; (c) it reduces weight; (d) it causes mild depression; or (e) it relieves nasal congestion.

(e) 6. The most hopeful approach to the solution of the glue sniffing problem at present appears to lie in (a) more stringent laws; (b) more stringent enforcement of existing laws; (c) voluntary control by distributors of glue and plastic cements; (d) replacement of volatile chemicals by non-intoxicating solvents; or (e) education of children concerning the hazards of introducing foreign substances into the body.

(e) 7. The effects of marihuana on the system most closely resemble the effects of (a) heroin; (b) LSD; (c) strong coffee; (d) ordinary cigarettes; or (e) alcohol.

(b) 8. From among the following side effects, the one which has not resulted from the use of LSD is (a) distortion of perceptions; (b) withdrawal illness; (c) delusions; or (d) severe depression.

(c) 9. The part of the opium poppy from which raw opium is derived is (a) dried flowers; (b) dried leaves; (c) unripe seed pods; (d) ripe seeds; or (e) unripe seeds.

(d) 10. From among the following substances, the one which is not an opium derivative is: (a) heroin; (b) morphine; (c) codeine; (d) cocaine; or (e) Percodan.

PART II

Attitudes and Opinion Survey

1. Suppose you find out that one of the boys on your block is misusing drugs. What should be done?

A. Nobody should do anything. It is his own business. _____ agree

_____ disagree

B. Tell the school or police about him. _____ agree

_____ disagree

C. Tell his parents. _____ agree

_____ disagree

2. Just the idea of smoking marihuana is the worst thing I can think of.

_____yes

_____no

3. Is this one of the main reasons that you would not use habit-forming drugs? You will hurt the people who are close to you.

_____yes

_____no

4. Is this one of the main reasons that you would not use habit-forming drugs? You become the helpless tool of people who sell drugs illegally.

_____yes

_____no

5. Is this one of the main reasons that you would not use habit-forming drugs? You'll be alone in the world. You won't have any real friends.

_____yes

_____no

6. Is this one of the main reasons that you would not use habit-forming drugs? You'll lose your chances for a good steady income.

_____yes

_____no

7. Young people living in cities are more apt to misuse drugs than those who live in the suburbs or country.

_____yes

_____no

8. You are more apt to misuse drugs if you associate with "bad" people.

_____yes

_____no

9. The personality of the individual has a great deal to do with the development of an addiction.

_____yes

_____no

10. Where did you pick up what information you have about the use of drugs?

CHECK ONLY ONE

A. from reading about it _____A

B. from what other teenagers say _____B

C. from my parents _____C

D. from teachers _____D

E. from what I see going on _____E

F. from television and movies _____F

11. Which one of these is most often responsible for introducing young people to drug misuse?

A. an adult ____A

B. a friend ____B

C. a stranger ____C

12. Giving information about drugs

CHOOSE ONE

A. will stop their misuse ____A

B. will encourage their misuse ____B

C. will make people curious who never thought about drugs before ____C

D. will have no effect ____D

Teacher Resource #2

Simplified Fact Sheet - Grade 6 and Basics Grade 9

1. A great deal of confusion exists regarding the facts of drug use and drug abuse.

   a. True
   b. False

2. All the drugs commonly abused are "narcotics."

   a. True
   b. False

3. Barbiturates are safe to take

   a. whenever one wants to
   b. when a friend offers some
   c. if they're in the family medicine chest
   d. only when prescribed by doctors

4. There is a growing trend to abuse

   a. barbiturates
   b. amphetamines
   c. both of the above

5. Any experimental drug may be dangerous.

   a. True
   b. False

6. Experimental means that experts

   a. know all the good effects
   b. know all the bad effects
   c. both of the above
   d. don't know all the good or bad effects

7. The effects of marihuana are

   a. Consistent - always pleasant
   b. Variable - sometimes unpleasant

8. The abuse of alcohol is a serious problem.

   a. True
   b. False

9. The major effects of all the drugs are

   a. on the mind
   b. on the body
   c. on both the mind and the body

10. What kinds of changes or "alterations" can these drugs produce in the mind?

    a. changes in moods (anxiousness, happiness, and sadness)
    b. changes in consciousness (awareness of things)
    c. feelings
    d. all of these things

11. A particular drug, given in the same amount or dosage, will affect

    a. all people the same way
    b. different people in different ways

12. A specific drug taken by the same person at different times may produce

    a. somewhat different results each time
    b. the same results always

13. What are these other factors that will modify (change) the basic action of a drug?

    a. a person's physical condition
    b. his personality and mood
    c. both his physical condition and his personality and mood

14. Can a person's expectations (what he wants to happen) influence how the drug will affect him?

    a. Yes
    b. No

15. When taking a drug, a person will react according to

    a. his expectations of the drug (what he wants it to do)
    b. the social setting where it is given
    c. both

16. A habit means a person

    a. really needs the drug
    b. feels that he needs the drug
    c. doesn't need the drug at all

17. What does "tolerance" mean? Does it mean that the original drug effects continue to be produced by

    a. the same amount of the drug
    b. only smaller amounts of the drug
    c. only larger amounts of the drug

18. All drugs can become habit forming.

    a. True
    b. False

19. Physical dependence, that is, physical addiction can develop with

   a. all drugs
   b. some drugs
   c. no drugs

20. What happens if a person addicted to a drug, physically dependent on it, can't get his drug?

   a. He gets better.
   b. He gets sick.
   c. Nothing happens.

21. All drugs can be dangerous.

   a. True
   b. False

22. The success of a law or regulation depends on

   a. the number of law enforcement persons
   b. the harshness of the regulation
   c. the power of the medical profession
   d. the willingness of people to obey the law

23. A person's decisions about drugs should be based on

   a. what his teachers want him to do
   b. what his friends want him to do
   c. what he knows about drugs and what he wants to do

Teacher Resource # 3

FILMSTRIP RESUMÉ

Eye Gate House, Inc., 146-01 Archer Drive, Jamaica, New York 11435

Filmstrips on Narcotics:

# 190C "Narcotics Background Information"

Depicts the following:

1. Habit-forming drugs
2. Beneficial uses of narcotics
3. Narcotics derived from opium
4. Cautions in the use of narcotics
5. Physical effects of addiction

# 190D "Narcotics and Health"

Depicts the following:

1. Use and misuse of cocaine
2. Useful drugs similar to cocaine
3. Marihuana and its effect
4. Sedatives and stimulants
5. Misuse of volatile substances
6. Regulations governing labeling

Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, Ill. 60614

A572-4 Filmstrip A572-2RR Record "Drug Misuse and Your Health"

This filmstrip has the following attributes:

1. It is well put together
2. It is well narrated
3. It is a very well presented summary of the entire "Drug Abuse" unit

Depicts the following:

1. Use of drugs
2. Misuse of drugs
3. Problems connected with misuse
4. Legislation concerning use and misuse

Teacher Resource #4

Film Guide

Title - Beyond LSD
25 minutes - Color
Film Associates
11559 Santa Monica Blvd.
Los Angeles, Calif., 90025

Description

The communication gap between two generations: teenagers and young adults on the one hand, and the generation of those over thirty - "the establishment" - exists. Teenagers' use of LSD and other drugs is only one of the symptoms of this communication gap. In this film, a group of parents desperately seek help in order to understand what has gone wrong in their relationships with their teenagers. J. Thomas Ungerleider, M.D., of Neuropsychiatric Institute at U.S.L.A. discusses some of the problems; points out importance of healthy, meaningful discussions about all of society's drugs between adolescents and adults.

Suggested Usage

Accelerated junior high, senior high, college, adult education groups. Subject area: Social studies.

Questions raised in this film demand a great deal of insight on part of students and careful preparation by the teacher.

Vocabulary

1. LSD
2. Drug abuse
3. Generation gap
4. Sexuality
5. Perceptivity
6. Gullibility
7. Alcoholism
8. Psychedelic trip
9. Tranquilizer

Guide Questions

1. Why do people use alcohol and dim lights at parties?
2. Why do some parents lie and distort to their children?
3. Why did the narrator use the technique of unidentified movie scenes?
4. How do children learn to tune out adults? Why do they do this?
5. What is the generation gap? Where does it come from?
6. What role does each of the following play in the generation gap:
   a. search for identity?
   b. gullibility?
   c. perceptivity?
   d. rules and regulations?
   e. adult defensiveness?
7. What is paradoxical about the drug situation?
8. What can be done by adults to ease the problem?
9. Why is it so important to keep the channels of communication open?

Teacher Resource #5

Film Guide

Title - Dangerous Drugs
22 minutes - Color
Narcotics Educational Foundation of America

Description

The focus of this film is on amphetamines and barbiturates. The growing misuse of these substances by many persons in varying situations is portrayed. The medical value of amphetamines and barbiturates is also covered.

Suggested Usage

Recommend highly for grades 6 and above. Could be used as either an introductory or summary activity in junior and senior high. Suitable for both science and social studies units.

Vocabulary

1. Amphetamine (bennies),(dexies)
2. Barbiturates (goofballs), (yellow-jackets)
3. Barbituric acid
4. Dependency
5. EEG - electroencephalogram
6. Oscilloscope
7. Illegal narcotic drug traffic
8. Addictive
9. Addict
10. Opiates
    - opium
    - morphine
    - heroin
11. Hypnotic
12. Withdrawal
13. Depressant
14. Stimulant
15. Toxic

Guide Questions

1. What are some of the reasons for using drugs?
2. How are dangerous drugs controlled?
3. How are barbiturates similar to alcohol?
4. What effects do barbiturates have on the body?
5. When is the use of barbiturates dangerous?
6. What is the pattern in drug use that leads to addiction?
7. What effects do amphetamines have on the body?
8. When is the use of amphetamines dangerous?
9. Why do many addicts turn to a life of crime?
10. Summarize the reasons for using drugs.
11. How did the girl obtain drugs?

Teacher Resource #6

Film Guide

Title - Drugs and the Nervous System
18 minutes - Color
Churchill Films

Description

The film explains how drugs affect many different parts of the body by working indirectly on the nervous system. Aspirin is used to illustrate how a common drug acts to reduce pain and fever in this complicated way. It is also used as a warning that drugs used without a doctor's instructions can be a poison.

The major portion of the film then explains the serious disruption of the nervous system caused by narcotics and substances taken for "kicks." Substances covered are airplane glue, stimulants (amphetamines), depressants (barbiturates, opiates), marihuana, and LSD. Produced largely in animation with effective abstract art work and music background.

Suggested Usage

Highly recommended for grade 6, junior high science, and senior high.

Vocabulary

1. Addict
2. Amphetamines (bennies)
3. Antibiotic
4. Bacteria
5. Barbiturates (goofballs)
6. Codeine
7. Cortex
8. Depressants
9. Electro-chemical impulses
10. Heroin
11. LSD
12. Marihuana
13. Microscopic
14. Molecules
15. Morphine
16. Nausea
17. Nerve fibers
18. Nerve impulses
19. Nervous system
20. Opium
21. Receptors
22. Stimulants
23. Strychnine
24. Thyroid glands

Guide Questions

1. In what ways do drugs affect the body?
2. How does aspirin affect the body?
3. Why is the taking of drugs safe only when prescribed by a doctor?
4. How can glue sniffing be poisonous?
5. What two kinds (types) of drugs affect the nervous system? How, briefly, does each affect the nervous system?
6. What is the most common type of depressant?
7. How are opiates and other narcotic drugs useful? Harmful?
8. What are the effects of stimulants?
9. What do marihuana and LSD have in common?
10. What are the possible dangers of LSD?
11. What is the real danger of marihuana?
12. What type of people misuse drugs; strong? weak? mature? immature? What do you think? Why?

Teacher Resource #7

Film Guide

Title - Bennies and Goofballs
20 minutes - Black and White
Precision Film Laboratories

Description

This is a hard-hitting documentary report narrated by Paul Newman with commentary by Doctor James L. Goddard, Commissioner, Food and Drug Administration, on the proper use and misuse of two major classes of prescription drugs - the amphetamines and barbiturates. Based on interviews with four actual victims of pep-pill and sleeping-pill abuse, the film details the dangerous psychological effects of "pill-popping," and explains how the new Drug Abuse Control Amendments will help control abuse.

Suggested Usage

Recommended for 9 - 12 grades Science and Social Studies

Vocabulary

1. Amphetamine
2. Barbiturate
3. Central nervous system
4. Sedate
5. Drug abuse
6. Potent drugs
7. Prescribed drugs
8. Mental deterioration
9. Physical deterioration
10. Psychological symptoms
11. Impairment of discriminatory movement
12. Underworld traffic
13. Black market drugs
14. Criminal traffic
15. Cardiovascular collapse
15. Hard narcotics
17. Addict
18. Alteration of psyche
19. Drug dependency

Guide Questions

1. What drugs is this film concerned with?
2. What do the many nicknames for pills indicate?
3. What amount of pills are misused yearly in the United States?
4. How are amphetamines used beneficially?
5. How are barbiturates used beneficially?
6. Define drug abuse.
7. Be able to describe how amphetamines affected the truck driver.
8. How does the abuse of amphetamine affect the physical condition of the body?
9. What is the number one cause of death by poisoning in the United States?
10. What are the two groups of people who abuse barbiturates?
11. Be able to describe how barbiturates affected the woman's brother.
12. Why is addiction to barbiturates more dangerous than addiction to narcotics?

13. Be able to describe how mixing bennies and goofballs affected the boy.
14. Be able to describe how drugs affected the 18-year-old boy who was in jail.
15. What were the loopholes in the drug control laws that made the Drug Abuse Control Amendments necessary?
16. How does Dr. Goddard think the Drug Abuse Control Amendments can solve the problem?
17. In what two ways should drugs be approached?

Sources

Baltimore County Film Library
Enoch Pratt Library
Maryland State Department of Health

Teacher Resource #8

Film Guide

Title - Hooked
20 minutes - Black and White
Churchill Films
622 N. Robertson Blvd.
Los Angeles, Cal. 90069

Description

Excellent film. Young people (ages 18 to 25) in what appears to be a security institution describe their experiences with drug addiction. Descriptions are uninhibited, sometimes shocking, and make frequent use of addicts' jargon. The young people speak with candor about what impelled them to use drugs, how drug abuse affected their relationships with others, and the disgust with which they now regard their drug experiences. Young people portrayed are drug addicts.

Suggested Usage

Junior high school social studies through college and adult groups. Not recommended for grade 6.

Vocabulary

1. Marihuana
2. Sniffing habit
3. Heroin
4. Addicted
5. Barbiturates
6. Supporting the habit
7. Dope-fiends
8. Narcotics
9. Phenobarbital
10. State Narcotic Act

Guide Questions

1. Why did the addicts start using the drugs?
2. What was the pattern of addiction?
3. How did the addicts support their habits?
4. In spite of the efforts of all the addicts not to get hooked, why did they all get hooked?
5. Describe the effects of withdrawal on the addicts.
6. Describe the reaction of the parents to their children's addiction.
7. What were the eventual mental and physical effects of the drugs on the user?
8. What insights did the addicts have?
9. Do you think these addicts will use drugs again? Why?

Teacher Resource #9

Film Guide

Title - The Losers
31 minutes - Black and White
WCBS - TV - N.J. 1965

Description

Fine exposition of the drug abuse problem in relation to teenagers. Film examines the prevalence and habitual use of chemicals and drugs among young people from 12 to 21. Actual experiences are recounted by youths from both slums and "nice" neighborhoods. Although it deals with problems from New York City, this kinescope of a TV program makes points applicable anywhere. Especially noteworthy is a clear presentation of the harmful effects of glue sniffing and the use of marihuana, stimulants, depressants, and heroin. (Description of drugs, their misuse and results, and apprehension, disposition, and treatment of addicts.)

Suggested Usage

6th grade, junior through senior high science or social science.

Vocabulary

1. marihuana
2. heroin
3. narcotics
4. glue sniffers
5. addictive
6. illegal narcotics
7. barbiturates
8. prescription drugs
9. phenobarbital
10. amphetamines
11. hypodermic syringe
12. therapeutic intervention
13. intravenous
14. oral use
15. acute intravenous narcoism
16. high hazard neighborhoods
17. pre-addicted (experienced)
18. illegal possession
19. psychiatric care
20. rehabilitation center
21. high narcotic incident
22. methadone

Guide Questions

1. How many addicts are estimated to be hooked on heroin in New York City?
2. What are some of the reasons teenagers use drugs?
3. Name some of the different types of drugs young people take.
4. Why are people usually arrested in connection with drugs?
5. Why does the police officer think the problem of dangerous drugs is increasing among young people?
6. Where does the problem of drug abuse and addiction exist?
7. How did the marihuana smoker become introduced to the drug?
8. What effects did marihuana smoking have on the boy?
9. What effects did glue sniffing have on the boy?
10. What is meant by the "Cycle of the Revolving Door"?
11. What was the percentage of increase of arrests from 1963 to 1964 in New York City?
12. What are some of the services provided for the addict in the hospital?
13. Where are the rehabilitation centers located? How effective are they?
14. How effective did the addict feel the methadone treatment was? Do you agree?

15. Which is harder to get - the money or the drug? What are the implications of this?
16. What is Daytop Lodge? How does it work?
17. What are the limitations of Daytop?
18. What percentage of the deaths caused by narcotic poisoning were people under the age of twenty-one in New York City?
19. In New York City, what percentage of the people who experiment with drugs become addicts?
20. Who are "The Losers"?

Teacher Resource #10

Film Guide

Title - LSD - 25
26 minutes - Color
16 mm

Description

This film gives a rational view of LSD and insight to the varied effects on the user of hallucinogenic drugs. It is technically accurate and effective in reaching the desired audience, high school and college level. Discusses power, availability, illegality, and results.

Suggested Usage

Not recommended for grade 6, Excellent for science and social studies grade 9 and senior high.

Vocabulary

1. chemical structure
2. strychnine
3. cyanide
4. microgram
5. midbrain
6. chromophotography
7. afterflash
8. autopsy
9. rigor mortis
10. electroencephalogram
11. chromosomes
12. hallucinations
13. marihuana
14. brain wave test

Guide Questions

1. How available is "acid"?
2. Why is LSD in the news so much?
3. Why is it so difficult to describe an LSD trip?
4. How powerful is LSD? Give examples.
5. What part of the body does LSD affect?
6. What are some of the benefits of LSD?
7. What are some of the disadvantages of LSD?
8. What are some of the laws that regulate the use of LSD?
9. Where does the supply of LSD come from? Why is this dangerous?
10. How long after a trip can hallucinations reoccur?
11. What are some of the questions that must be answered in the future about LSD?

Source

Professional Arts, Inc.
P. O. Box 8484
Universal City, Calif. 91608
Rental or Purchase

Teacher Resource #11

Film Guide

Title - Narcotics - Why Not?
15 minutes - Color
Charles Cahill and Assoc., Inc.

Description

This film presents a series of extemporaneous interviews with male and female residents of the California Rehabilitation Center. Both teenagers and young adults relate how they were introduced to glue, stimulants and depressants, marihuana, and heroin. They tell what it is like to be under the influence of dangerous drugs, discuss their regrets, and examine their hopes for the future.

Suggested Usage

Recommended for 9-12 grade science and social studies. Could be used in 7th and 8th grade with adequate prior preparation. Do not use without previewing.

Vocabulary

1. Marihuana
2. Narcotics
3. Barbiturates
4. Memory lapse
5. Opiate
6. Heroin

Guide Questions

1. What are some of the reasons for abusing drugs?
2. What were the effects of the drugs?
3. How did the people get money for their habits?
4. What is the attitude of the police towards the pusher?
5. What percentage of the people released from Federal hospitals were cured?

Sources

Baltimore County Film Library
Enoch Pratt Library

TEACHER RESOURCE #12

Film Guide

Title - Narcotics - A Challenge
24 minutes - Color
Narcotics Educational Foundation of America - 1963

Description

Basic information about narcotics and other drugs of abuse. Presents facts about drug misuse and some causes of addiction. Major emphasis on heroin addiction with some mention of marihuana addiction.

Suggested Usage

Primarily recommended for teachers and adult use. This film should not be shown in grade 6 and below.

Before being shown to junior and senior high students, the film should be carefully previewed by the classroom teacher to determine whether the concepts are suitable for particular classroom situations.

This film is not recommended for use as an introductory or motivating activity in social studies. It could be used after much work has been done with use and misuse of drugs.

Vocabulary

1. Abstinence syndrome
2. Addict
3. Amphetamines
4. Barbiturates
5. Cocaine
6. Depressant
7. Euphoria
8. Heroin
9. Hypnotic
10. Illicit drug traffic
11. Intravenous
12. Marihuana
13. Opiates
14. Primary addiction
15. Pusher
16. Reactive addiction
17. Symptomatic addiction

Guide Questions

1. What are the main types of narcotics and drugs?
2. Where is drug misuse a problem?
3. What is the common characteristic of the potential addict?
4. What are some of the types of problems that seem to overwhelm the potential addict and cause him to seek drugs?
5. What are the three types of addiction?
6. How does drug addiction affect the unborn child?

Sources

Board of Education Film Library
Enoch Pratt Library

Teacher Resource #13

Glossary of Technical and Slang Terms

ABSTINENCE SYNDROME - The body's violent reaction to the withdrawal from habit-forming drugs.

ACUTE INTRAVENOUS REACTION - Serious demand for drug injection.

ADDICT - One who has become dependent upon a drug.

ADDICTION - In 1957, the World Health Organization (WHO) defined drug addiction as a state of periodic or chronic intoxication produced by the repeated consumption of a drug. Its characteristics include: 1) an overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means; 2) a tendency to increase the dose; 3) a psychic (psychological) and generally a physical dependence on the effects of the drug; 4) an effect detrimental to the individual and to society.

ALTERATION OF PHYSIQUE - Changes in bodily make-up.

AMPHETAMINE - A man-made stimulant drug.

ANTIBIOTIC - A powerful germ-killing substance produced by mold or similar fungus.

AUTOPSY - Inspection and dissection of the body after death.

BACTERIA - One-celled plants, some of which cause disease.

BARBITURATE - A synthetic drug used to induce sleep; a depressant.

BARBITURIC ACID - The substance from which the sedative and hypnotic drugs are derived.

BLACKMARKET DRUGS - Illicit trade in drugs in violation of official regulation.

CARDIOVASCULAR COLLAPSE - A breakdown relating to or involving the heart and blood vessels.

CENTRAL NERVOUS SYSTEM - The brain and spinal cord coordinates and controls the voluntary muscles, the sense organs, and the mind.

CHEMICAL STRUCTURE - The composition of substances and various elementary forms of matter.

CHROMOPHOTOGRAPHY - Photography in color.

CHROMOSOMES - Tiny rod-like bits of protoplasm within the cell.

COCAINE - A stimulating narcotic that has addicting qualities.

CODEINE - A mild narcotic drug, derived from opium.

CONVULSIONS - An involuntary and violent irregular series of contractions of the muscles.

CORTEX - The outer layer of gray matter that makes up the surface of the brain.

CRIMINAL TRAFFIC - Involvement in illicit or illegal traffic of drugs.

CYANIDE - A salt of hydrocyanic acid.

DELIRIUM - A condition characterized by mental excitement, confusion, disordered speech, and, often, hallucinations.

DEPENDENCY - In terms of drug usage, the state of being addicted to, or dependent upon, the use of habit-forming drugs.

DEPRESSANT - A drug that reduces functional body activity, produces muscular relaxation, and slows down functions of the central nervous system.

DRUG ABUSE - Intentional misuse.

DRUG DEPENDENCE - As described in 1963 by WHO, drug dependence is "a state arising from repeated administration of a drug on a periodic or continuous basis." Its characteristics will vary with the agent involved. This is made clear by designating the particular type of drug dependence in each specific case; for example, drug dependence of the morphine type, of the cocaine type, of the cannabis type, of the barbiturate type, etc.

ELECTRO-CHEMICAL REACTION - The process by which a nerve impulse is transmitted.

ELECTROENCEPHALOGRAM - (EEG) A line picture of the electrical activities of the "brain waves" of the cerebral cortex.

EUPHORIA - Feeling of well-being or elation.

GENERATION GAP - Gap between those people under 30 and those over 30 years of age.

GLUE SNIFFERS - Inhalation of the fumes of glue, producing a tingling sensation and a feeling of excitement.

GULLIBILITY - The quality or state of being gullible.

HABITUATION - As defined in 1957 by WHO, drug habituation is a condition resulting from the repeated consumption of a drug, which includes these characteristics: 1) a desire (but not a compulsion) to continue taking the drug for the sense of improved well-being that it engenders; 2) little or no tendency to increase the dose; 3) some degree of psychic dependence on the effect of the drug, but absence of physical dependence and, hence, no abstinence syndrome; 4) a detrimental effect, if any, primarily on the individual.

HALLUCINOGEN - Any of several drugs, popularly called psychedelics, which produce sensations such as distortions of time, space, sound, color and other bizarre effects. While they are pharmacologically non-narcotic, some of these drugs (e.g. marihuana) are regulated under Federal narcotic laws.

HEROIN - An addicting depressant narcotic.

HIGH HAZARD NEIGHBORHOOD - Neighborhoods with easy availability to the purchase of drugs, also where drugs are widely used.

HYPNOTIC DRUG - A sleep-inducing agent.

HYPODERMIC SYRINGE - A small syringe used with a hollow needle for injection of material into or beneath the skin.

ILLEGAL POSSESSION - Unlawful possession of drugs.

ILLICIT DRUG TRAFFIC - Unlawful sale of drugs.

IMPAIRMENT OF DISCRIMINATORY MOVEMENT - Inability to make fine distinction in physical movements.

INTRAVENOUS - Entering by way of the veins.

LSD - A white, tasteless, odorless chemical. Use of the drug causes vivid hallucinations in colors.

MARIHUANA - A strong stimulation herb.

MEMORY LAPSE - A blurring or loss of memory; frequently, one of the results of excessive drug usage.

MENTAL DETERIORATION - Impairment of the ability to reason.

METHADONE - A synthetic narcotic drug.

MICROGRAM - A small unit or weight equal to a millionth part of a gram.

MIDBRAIN - The middle segment of the brain.

MORPHINE - A depressant narcotic derived from opium.

NARCOTIC - This term has two definitions. Medically defined, a narcotic is any drug that produces sleep or stupor and also relieves pain. Legally defined, the term means any drug regulated under the Harrison Act and other Federal narcotic laws. Some of these regulated drugs are pharmacologically non-narcotic (e.g. cocaine).

NARCOISM - An arrested stage produced by the influence of narcotics or other chemical.

NAUSEA - Stomach stress with loathing for food and urge to vomit.

NERVE FIBER - Thread-like bundle of sensory and motor neurons.

NERVE IMPULSE - Bursts of activity which are the basis of all awareness of bodily activities.

NERVOUS SYSTEM - The combination of brain, spinal cord, and nerve fibers that make up the communication system of the body.

OPIATES - A preparation or derivative of opium; something that induces rest or inaction or quiets uneasiness.

OPIUM - A narcotic (depressant) that comes from the unripe seed pods of the opium poppy.

ORAL USE - To take by mouth.

OSCILLOSCOPE - An instrument which registers electric impulses as a visible ray on a cathode-ray tube.

PERCEPTIVITY - The meaningful impression of an object obtained by use of the senses.

PHENOBARBITAL - A crystalline barbiturate used as a hypnotic and sedative.

PHYSICAL DEPENDENCE - Physiological adaptation of the body to the presence of a drug. In effect, the body develops a continuing need for the drug. Once such dependence has been established, the body reacts with predicable symptoms if the drug is abruptly withdrawn. The nature and severity of withdrawal symptoms depend on the drug being used and the daily dosage level attained.

PHYSICAL DETERIORATION - Physical retrogression; falling from a higher to lower level in quality and vitality.

POTENT DRUGS - Powerful drugs.

POTENTIATION - Potentiation occurs when the combined action of two or more drugs is greater than the sum of the effects of each drug taken alone. Potentiation can be very useful in certain medical procedures. For example, physicians can induce and maintain a specific degree of anesthesia with a small amount of the primary anesthetic agent by using another drug to potentiate the primary anesthetic agent. Potentiation may also be dangerous. For example, barbiturates and many tranquilizers potentiate the depressant effects of alcohol.

PRE-ADDICTED EXPERIENCE - An early experience with drugs; before addiction.

PRESCRIBED DRUGS - Drugs ordered by a doctor for use as a remedy.

PRIMARY ADDICTION - Use of a drug for adjustment to particular personality defect.

PSYCHEDELIC TRIP - The distortion of the senses of time, distance, vision, and hearing resulting from the use of a drug.

PSYCHIATRIC CARE - Medical care dealing with mental, emotional, or behavioral disorders.

PSYCHOLOGICAL DEPENDENCE - An attachment to drug use which arises from a drug's ability to satisfy some emotional or personality need of an individual. This attachment does not require a physical dependence, although physical dependence may seem to reinforce psychological dependence. An individual may also be psychologically dependent on substances other than drugs.

PSYCHOLOGICAL SYMPTOMS - Symptoms directed toward the mind. (mental)

PSYCHOSIS - A major mental disorder; any serious mental derangement. "Psychosis" replaces the old term "insanity."

REACTIVE ADDICTION - The taking of a drug motivated by the desire to become a member of the group.

RECEPTOR - The end of a nerve from which an impulse starts.

REHABILITATION CENTER - A center offering medical attention, a variety of work, recreation, and religious opportunities; and an incentive toward leading a healthier and fuller life.

RIGOR MORTIS - Stiffening of the body after death.

SEDATE - To slow down the nervous system.

SEDATIVE - An agent which quiets or calms activity.

SIDE EFFECTS - A given drug may have many actions on the body. Usually one or two of the more prominent actions will be medically useful. The others, usually weaker effects, are called side effects. They are not necessarily harmful, but may be annoying.

STIMULANTS - Drugs that increase the activities of the central nervous system and decrease the desire for sleep.

STRYCHNINE - A bitter crystalline alkaloid that is poisonous.

SYMPTOMATIC ADDICTION - Drug use incidental to pattern of delinquent behavior.

THERAPEUTIC INTERVENTION - Intervention for the treatment of drug addiction.

TOLERANCE - With many drugs, a person must keep increasing the dosage to maintain the same effect. This characteristic is called tolerance. Tolerance develops with the barbiturates, with amphetamine and related compounds, and with opiates.

TOXIC - A poison formed by bacteria in living tissues and also in non-living food substances.

TOXIC EFFECTS (POISONING) - Any substance in excessive amounts can act as a poison or toxin. With drugs, the margin between the dosage that produces beneficial effects and dosage that produces toxic or poisonous effects varies greatly. Moreover, this margin will vary with the person taking the drug.

TRANQUILIZERS - Drugs used medically to counteract tension and anxiety without producing sleep or significantly impairing mental and physical function.

UNDERWORLD TRAFFIC - The world of organized crime.

WITHDRAWAL SYMPTOMS - Severe physiological reaction resulting from discontinuing the use of alcohol and various drugs.

Teacher Resource # 14

NARCOTICS CONTROL LEGISLATION

A chronological list of some of the steps taken to control narcotics use in the United States follows:

1906 -- Federal Pure Food and Drug Act. This act regulated the use of patent medicines containing opiates.

1914 -- Harrison Narcotic Act. This regulated the manufacture and distribution of morphine, cocaine, and other narcotics.

1922 -- Narcotic Drugs Import and Export Act. This provided heavy penalties for illegal import and export of narcotics.

1930 -- Establishment of the Bureau of Narcotics within the Treasury Department. The bureau's major function was to administer laws related to the traffic in narcotic drugs.

1937 -- Marihuana was placed under control of federal legislation.

1944 -- Demerol, a synthetic substitute for morphine, was placed under the control of federal legislation.

1946 -- Harrison Narcotic Act Amendment. The original act of 1914 was amended to include synthetic substances having addiction-forming or addiction-sustaining qualities similar to cocaine or morphine.

1960 -- Narcotic Manufacturing Act. This act was established to organize a system of manufacturing quotas and licenses for all basic classes of drugs. It requires written prescriptions for certain preparations that have been abused, especially by young people.

1962 -- White House Conference. More than 400 experts from various fields of medicine, science, law enforcement, research pharmacology, social work, education, and others, met in Washington, D. C., to discuss and pool information concerning the problems of narcotic and drug abuse.

1965 -- The Drug Abuse Control Amendments. These amendments provided for stronger regulation of the manufacture, distribution, delivery, and possession of stimulant, depressant, and other psychotoxic drugs. The Food and Drug Administration was given stronger enforcement powers to prevent drug counterfeiting. These amendments became effective February 1, 1966.

1966 -- The Bureau of Drug Abuse Control. This separate bureau was organized to carry out the responsibilities of the Food and Drug Administration under the Drug Abuse Control Amendments of 1965. The major functions of the bureau are case assistance, investigations, and drug studies and statistics.

Teacher Resource # 15

SUGGESTIONS FOR GLUE SNIFFING EXPERIMENT

I. Purpose: To expose students to the physiological and behavioral changes glue sniffing can produce in a laboratory mammal

II. Notes to the Teacher

A. Collect the following materials:

1. Three pair of mice if done as a teacher demonstration.
2. One pair of mice per group if student groups are used. (Each pair should be litter mates, preferably of the same sex.)
3. Airplane glue for plastic models.
4. Wide-mouth pint-size jars with lids (one pair for each pair of mice).
5. One-gallon glass aquarium.

B. Explain in advance to the class the purpose of the experiment and the procedure outlined in section III below.

C. Ask the students to predict the behavioral and physiological changes they expect to observe in the experimental mouse when the procedure is actually tried. List these on the board before proceeding to section III.

III. Procedure

A. Mark the experimental and control mice with indelible ink so they can be distinguished. The tail or ear is a good location for such markings.

B. Place the experimental and control mice in an aquarium and let the students observe their natural appearance and behavior after temporary adaptation to their new surroundings. Some specific suggestions to guide these observations follow:

For both experimental and control mice:

1. Count breathing rate for 15 seconds.
2. Note condition of the eyes -- are they open wide or partly closed?
3. Note the posture of the animal and general activity in moving about (active, very active, or quiet).
4. Touch the animal gently with a pencil and record his reaction to touch and pressure stimuli.
5. Introduce food the animal normally uses in the diet and see if he shows interest.
6. Observe any examples of anti-social behavior.

Physical Appearance and Behavior
Before Exposure to Glue

Experimental	Control
1	
2	
3	
4	
5	
6	

C. Transfer the animals to the test jars at the same time and close the lids immediately.

Control
Jar # 1

Experimental
Jar # 2

Jar # 2 has a drop of glue on the lid.

D. Begin timing the experiment when the lids are closed. As time proceeds noticeable comparisons can be made between the experimental and the control mouse. Record such events as staggering, scratching the nose, muscular twitching, rapid breathing, and eyes closing at the time of the occurrence of each event.

Record of Events That Occurred and Time
Of Their Occurrence During Exposure to Glue

Time in Seconds	What Occurred	Experimental Mouse (E) or Control Mouse (C)

Let one or more students record such data while others concentrate on making accurate observations of behavior and the times of occurrence.

E. Remove mice simultaneously from both experimental and control jars and place them in the aquarium to see if noticeable comparisons can still be made when exposure to glue is stopped and the animals are in larger surroundings.

Use the six guidelines for observation listed in section B of the procedure.

Physical Appearance and Behavior
After Exposure to Glue

	Experimental	Control
1		
2		
3		
4		
5		
6		

IV. Follow-Up Discussion and Activities

A. Have the class write a summary statement based on their recorded observations regarding the physiological and behavioral effects glue sniffing had on mice in this experiment.

B. Compare the actual results of the investigation with the predicted results.

C. Have the students discuss and then write a summary paragraph to evaluate whether they think these physiological and behavioral changes caused by glue sniffing were beneficial or possibly harmful to the experimental animal. Have them cite specific reasons where possible to justify their point of view.

D. Use these guide questions after the investigation has been completed:

1. Did the experiment show that glue alone produced the observed effects on the experimental mice?
2. Did a decreasing oxygen supply and increase in carbon dioxide in the small containers influence the changes in the experimental mice? Give reasons why or why not.
3. Why should the procedure be applied to more than one pair of mice before trying to evaluate the effects of glue sniffing?
4. Why do you suppose a mammal was selected for the subject of the experiment?
5. Can you think of ways to modify the experiment so that the effects of glue sniffing can be observed more accurately? If so, list them.

V. Suggestions to the Teacher and Ways to Expand This Experiment

A. Mice can vary in their tolerance; therefore, testing several different mice and comparing to a control is recommended to achieve a more valid understanding. For example, one test mouse might show some effects with one drop of glue in 40 seconds while another responds to 1/2 drop of glue after two minutes. A teacher may want to investigate whether the amount of glue needed may correlate to the body weight of the experimental mice.

B. If done as a teacher demonstration, at least three pair of test mice should be used. Larger mammals such as hamsters or rats might be preferred over mice. Students can assist in timing, recording data, and making comparisons between experimental and control animals.

C. Student groups of five or six students carefully supervised can perform the experiment with one pair of mice and compare their results to those of other groups. The decision to use student groups should rest on the availability of supplies and the teacher's self-evaluation of sufficient classroom control.
Caution: Because of student curiosity, every precaution should be taken to preclude any attempts to self-experiment with glue while doing this activity. Teachers should provide gloves for the students who will be handling the mice.

D. Ways to modify and extend the experiment:

1. In subsequent tests vary the time exposure to the glue while keeping the amount used constant.
2. Keeping the time constant, vary the amount of glue applied to the lid. Start with 1/4 drop and gradually increase to as much as four or five drops in subsequent tests. If this is done, it is suggested that teachers determine the lethal dose for an average mouse in advance despite recognition of the fact that tolerances do vary.
3. Extend observations and experimentation over several days or weeks to determine long-range effects or any tendency of the animals to become immune to one quantity level administered. Autopsy may reveal heart, lung, brain, liver, or kidney damage as long-range effects. It may also be learned that mice need increasingly larger dosage of glue to show effects that were previously brought about by lesser quantities administered.
4. Additional investigation using test mazes may reveal temporary memory loss in experimental compared to control animals.

E. Use codeine-containing cough syrups, paint thinner, lighter fluid, or gasoline fumes to test additional substances sometimes abused by young people. Teacher resourcefulness and class suggestions may find effective procedures for testing the substances; for example, cough syrup could be given directly or diluted in drinking water.

Teacher Resource #16

Suggestions For Demonstrating Some Properties Of and Uses For Solvents

Purpose:

1. To demonstrate that some substances produce vapors or fumes that are harmful to the human body.
2. To stress the importance of reading labels and following directions when using these substances.

1. Make a collection of empty containers of cleaning fluids, paint thinner, paint remover, acetone, ditto fluid, carbon tetrachloride, lighter fluid, spray paint, gasoline, varsol, etc.

2. Pass the containers around the class and have the students copy the name of each substance and the warnings given for its use.

3. Discuss the skull and cross-bones as a symbol to warn of a poison, and that poisoning can result from both swallowing and inhalation of the substance in the container.

4. Demonstrate the rates at which some of these substances evaporate as follows:

    a. Soak a sponge in a solvent (gasoline, ditto fluid, lighter fluid, etc.) and wipe a wide streak on the chalk board. Have the students record the time it takes to evaporate.

    b. Discuss the process of evaporation.

    c. Provide students with small containers all the same size (evaporating dishes or jar lids). Pour in a measured amount of solvent (a teaspoon or a tablespoon). Have students record the time it takes to evaporate.

    d. Discuss factors that affect the rate of evaporation (i.e. temperature, surface area, etc.).

5. Discuss with the class the rates at which these substances can be taken into the body by inhalation and the necessity for observing the caution printed on the containers.

6. List on the chalk board substances that should not be inhaled as determined by the students.

7. (Optional) Demonstrate how these substances are useful when properly used (solvent for grease, chewing gum, paint, etc.).

Student Work Sheet

List two ways in which you can become poisoned.

1.______________________________

2.______________________________

I. A. Write the name of each substance in the empty containers on the chart. (Leave several lines between each name.)

B. Read the cautions or warnings on each label and record on the chart.

Substance	Caution or Warning
1.	
2.	
3.	
4.	
5.	

C. What does the skull and cross-bones symbol mean?

____

D. Look up the meaning of:

1. Inhalation____
2. Fumes____
3. Vapor____

II. Follow the directions of your teacher in testing the rates at which some of these substances will evaporate.

Record your results on the chart.

Substance	Evaporation Time
1.	
2.	
3.	
4.	
5.	

III. Read in your text about poisonous fumes.

IV. Write the answers to the following:

1. Name two ways in which you can become poisoned.

   1.____

   2.____

2. List some substances other than the ones you tested that you should not inhale.

   1.______________________________

   2.______________________________

   3.______________________________

   4.______________________________

   5.______________________________

V. List the uses for the substances that were in the containers that make them useful to us.

1.____

2.____

3.____

4.____

5.____

Teacher Resource #17

Dictionary Exercises for Slang Words
See Drug Abuse: Escape to Nowhere, pp. 98-104

The short paragraph is recommended for slower children while the short story is recommended for average or above-average children.

I.

The bagman had artillery and plenty of hard stuff, hay, and lid proppers. We made a meet for manicure and lipton tea Miss Emma. Whiskers dropped in on swingman. Now the search is on for a new connection.

(trans.)

The supplier had equipment for injecting drugs and plenty of morphine, cocaine, or heroin, marihuana, and amphetamine. We purchased high-grade marihuana and poor quality morphine. Federal narcotics agents arrested the supplier. Now the search is on for a new supplier.

II.

The dealer knew that the junkies were afraid of cold turkey. The snow, hemp, and harry, in fact most drugs, were being watched by the heat. Because the gowheads and monkeys were also afraid of the Man, they were willing to pay any amount of geetis for any drug, even lipton tea. Some of the cagier bagmen sold turkies but most sold blanks.

Some of the junkies tried to cop out, but their bodies were later found at the bottom of the Patapsco River. The bulls never seemed able to bust the dealers. The junkies, however, were often unable to make a connection and tried to steal any kind of domino. They were the ones who were usually slammed.

Once fresh and sweet, the hophead often went back on the nod and again turned to crime as a means of paying for a score. Quite often, Sam found the shooting gallery and the hopheads lit up. No one was safe. After watching many junkies take hot shots, get gypped by the swingman, arrested by Whiskers, and still be charged up, the square decided to avoid the bag in all of its forms, acid, dope, gage, co-pilots, and all types of rainbows and red-devils.

(trans.)

The supplier knew that the narcotic addicts were afraid of sudden withdrawal of drugs. The cocaine, the marihuana, and the heroin, in fact most drugs, were being watched by the police. Because the opium addicts and those with a drug habit where physical dependence is present were also afraid of the police, they were willing to pay any amount of money for any drug, even poor quality narcotics. Some of the cagier suppliers sold a capsule purported to be narcotic but it was filled with a non-narcotic substance, but most sold poor quality narcotics.

Some of the narcotic addicts tried to confess, but their bodies were later found at the bottom of the Patapsco River. The police officers never seemed to be able to arrest the suppliers. The narcotic addicts, however, were often unable to purchase drugs and tried to steal any kind of drugs. They were the ones who were usually in jail.

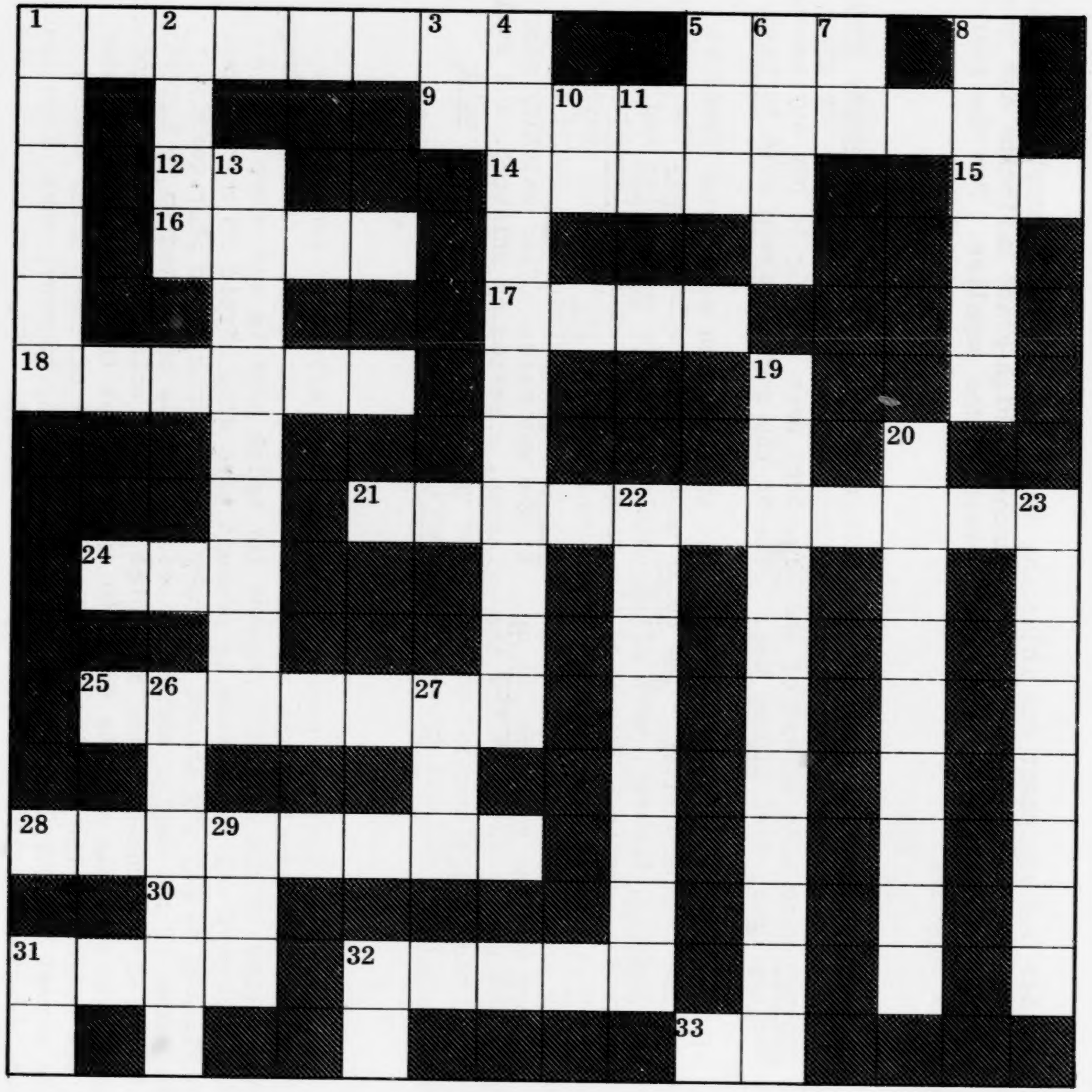
Once out of jail, the narcotic addict often went back under the influence of drugs and again turned to crime as a means of paying for the purchase of drugs. Quite often Federal narcotics agents found the place where narcotic addicts inject drugs and the narcotic addict under the influence of drugs. No one was safe. After watching many narcotic addicts take fatal dosages, get gypped by the supplier, arrested by Federal narcotics agents, and still be under the influence of drugs, the non-addict decided to avoid drugs in all of their forms, LSD, narcotics, marihuana, amphetamines, and all types of barbiturates.

Teacher Resource #18

Sentence Crossword Puzzle

DOWN

1. Hypodermic syringe
2. Police search
3. pronoun
4. involuntary, violent, contractions of the muscles
5. verb (to be)
6. individual history for purposes of diagnosis and treatment
7. one-half of a printer's measure
8. to calm or tranquilize
10. sixth note on musical scale
11. full printer's measure
13. low in spirits
19. condition resulting from repeated taking of drugs
20. produces excitement
22. agent that induces sleep
23. confused state
26. taking of narcotics
27. to fasten or attach
29. find
31. pronoun
32. preposition



ACROSS

1. Heroin is a _____
5. high or low card
9. necessity for increased dosage to maintain same effect
12. the subconscious
14. drug supplier hardly knows the ____ of his clients
15. carry out, perform
16. to distribute
17. one who uses narcotics is called this
18. "pep"
21. lack of self control
24. central nervous system
25. one who is addicted to a drug
28. necessary to
30. you're "with it"
31. intellectual ability
32. effect of excessive amount
33. "way out" with drugs- turned _____

DOWN

1. Hypodermic syringe
2. Police search
3. pronoun
4. involuntary, violent, contractions of the muscles
5. verb (to be)
6. individual history for purposes of diagnosis and treatment
7. one-half of a printer's measure
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20. produces excitement
22. agent that induces sleep
23. confused state
26. taking of narcotics
27. to fasten or attach
29. find
31. pronoun
32. preposition

1 N	A	2 R	C	O	T	3 I	4 C	▨	▨	5 A	6 C	7 E	▨	8 S	▨
E	▨	A	▨	▨	▨	9 T	O	10 L	11 E	R	A	N	C	E	▨
E	▨	12 I	13 D	▨	▨	▨	14 N	A	M	E	S	▨	▨	15 D	O
D	▨	16 D	E	A	L	▨	V	▨	▨	▨	E	▨	▨	A	▨
L	▨	▨	P	▨	▨	▨	17 U	S	E	R	▨	▨	▨	T	▨
18 E	N	E	R	G	Y	▨	L	▨	▨	▨	19 H	▨	▨	E	▨
▨	▨	▨	E	▨	▨	▨	S	▨	▨	▨	A	▨	20 S	▨	▨
▨	▨	▨	S	▨	21 U	N	I	N	22 H	I	B	I	T	E	23 D
▨	24 C	N	S	▨	▨	▨	O	▨	Y	▨	I	▨	I	▨	E
▨	▨	▨	E	▨	▨	▨	N	▨	P	▨	T	▨	M	▨	L
▨	25 A	26 D	D	I	C	27 T	S	▨	N	▨	U	▨	U	▨	I
▨	▨	O	▨	▨	▨	I	▨	▨	O	▨	A	▨	L	▨	R
28 D	E	P	29 E	N	D	E	D	▨	T	▨	T	▨	A	▨	I
▨	▨	30 I	N	▨	▨	▨	▨	▨	I	▨	I	▨	N	▨	U
31 M	I	N	D	▨	32 T	O	X	I	C	▨	O	▨	T	▨	M
Y	▨	G	▨	▨	O	▨	▨	▨	▨	33 O	N	▨	▨	▨	▨

ACROSS

1. Heroin is a _____
5. high or low card
9. necessity for increased dosage to maintain same effect
12. the subconscious
14. drug supplier hardly knows the ___ of his clients
15. carry out, perform
16. to distribute
17. one who uses narcotics is called this
18. "pep"
21. lack of self control
24. central nervous system
25. one who is addicted to a drug
28. necessary to
30. you're "with it"
31. intellectual ability
32. effect of excessive amount
33. "way out" with drugs-turned ____

Crossword #1

DOWN

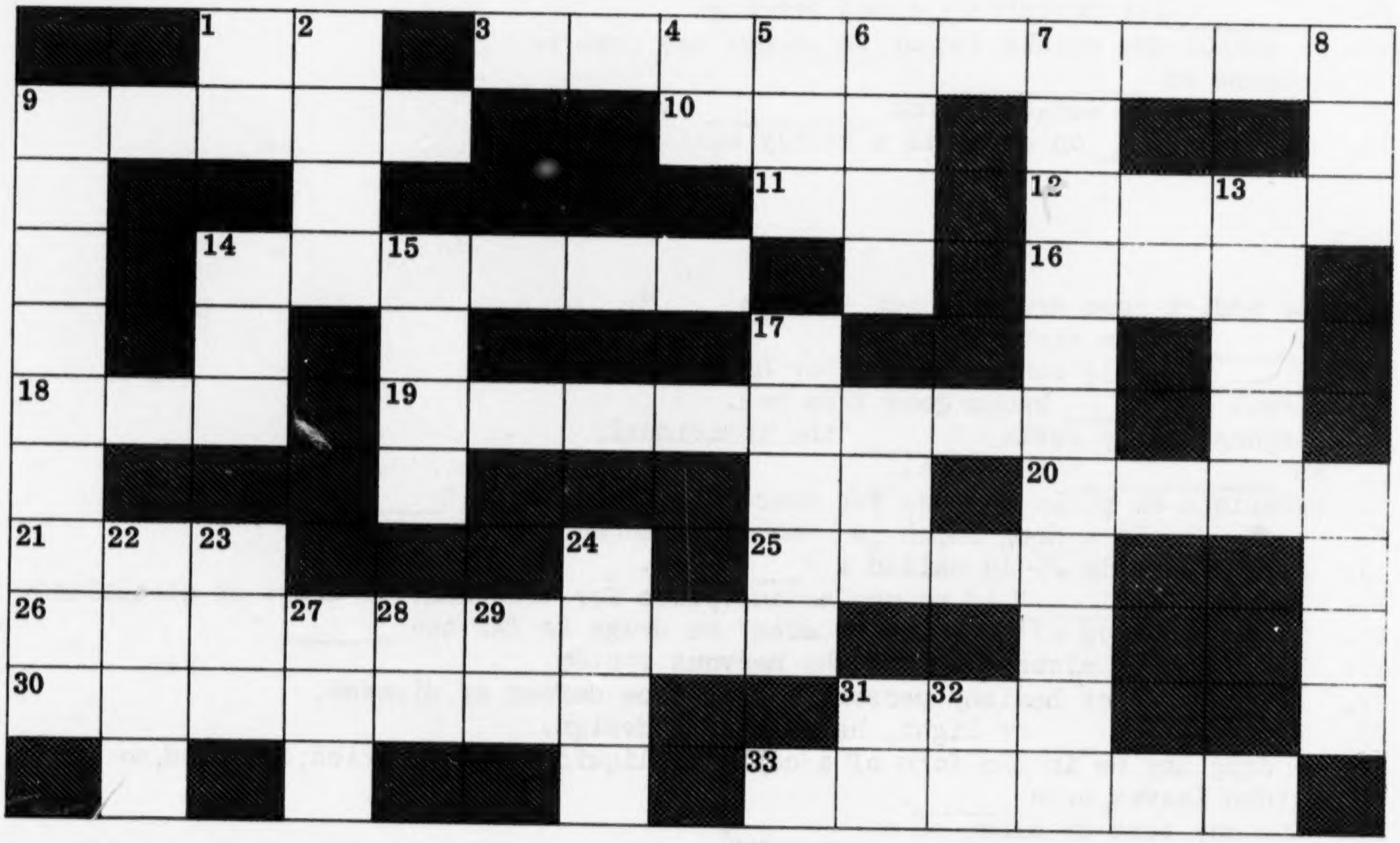
1. needle
2. raid
3. it
4. convulsions
5. are
6. case
7. en
8. sedate
10. la
11. em
13. depressed
19. habituation
20. stimulant
22. hypnotic
23. delirium
26. doping
27. tie
29. end
31. my
32. to

ACROSS

1. narcotic
5. ace
9. tolerance
12. id
14. names
15. do
16. deal
17. user
18. energy
21. uninhibited
24. central nervous system
25. addicts
28. depended
30. in
31. mind
32. toxic
33. on

Teacher Resource #19

A SENTENCE CROSSWORD
Basic and 6th Grade
Crossword #2



A Sentence Crossword
(Crossword #2)
Basic and 6th Grade

ACROSS

1. An exclamation.
3. An amphetamine (Bennie or Goofball)
9. _______, and lots of it must be had to pay for addiction.
10. To steal is to _______, or may describe an injection of drugs.
11. Best answer to offer of LSD is _______.
12. The addict's _______ is hard to hide.
14. The ________ must arrest for possession of drugs.
16. If the police arrests for drugs, or the addict buys drugs a "_______" is made.
18. If a person is "_______" he is wanted by the police.
19. When the body takes more and more drugs to get the same effect, it is said to be _______.
20. A careful person ________ questions often.
21. Exclaim.
25. Improperly used and dirty needles may inject a ______.
26. _______ are definitely habit forming.
30. A person who drinks liquor to excess may come to depend on ___________.
31. Sometimes an addict cannot _________ away.
33. To ________ on drugs is a costly habit.

DOWN

1. The addict uses drugs to get "turned ___".
2. A ______ does brave things.
4. _________ (#3) can be helpful or harmful (prc.)
5. A real ________ knows good from bad.
6. Responsibility rests _______ the individual.
7. An ___________stimulates.
8. Materials or pills for use for narcotics is called a "______."
9. _________ is a drug which is smoked or eaten.
13. As a cigarette #9 is called a "_______".
14. The "__________" is an unpleasant place for treatment of drugs or alcoholism.
15. To try to stop after being "hooked" on drugs is far too ______.
17. _______when misused affect the nervous system.
22. A ________ or healthy person is free from defect or disease.
23. A curved ______ of light, helps make a design.
24. A drug may be in the form of a capsule, liquid, powder, dried, crumbled, or green leaves, or a _____.
27. One may rest or sleep on a _______.
28. Short exclamation.
29. There are many resources_______use in a study of drugs.
31. This topic is _________ (about) drugs.
32. ______is opposite of down.

Crossword #2
KEY

DOWN

1. on
2. hero
4. it
5. man
6. upon
7. amphetamine
8. set
9. marihuana
13. stuck
14. pat
15. late
17. drugs
22. hale
23. arc
s4. pill
27. cot
28. oh
29. to
31. re
32. up

ACROSS

1. oh
3. stimulates
9. money
10. top
11. no
12. past
14. police
16. hit
18. hot
19. tolerant
20. asks
21. aha
25. germ
26. narcotics
30. alcohol
31. run
33. depend

Teacher Resource #20
Matching Definitions and Terms

Choose best answer from Column II and write it beside the matching term in Column I.

____ 1. Alcohol
____ 2. Caffeine
____ 3. Barbiturate
____ 4. Depressant
____ 5. Sedative
____ 6. Amphetamine
____ 7. Habituation
____ 8. Marihuana
____ 9. Addiction
____ 10. Convulsion
____ 11. Delirium
____ 12. Depressant drug abuser
____ 13. Drug depressant
____ 14. Poisonous
____ 15. Hallucinogens
____ 16. Physical dependence
____ 17. Narcotic
____ 18. Side effects of drugs
____ 19. Tolerance
____ 20. Toxic effect
____ 21. LSD
____ 22. Federal control
____ 23. Antipsychotic tranquilizers
____ 24. Heroin
____ 25. Personality change

a. psychological dependence
b. stimulant
c. periodic or chronic intoxication
d. violent contractions of muscles
e. mental excitement, often hallucinations
f. overpowering desire or need
g. the body develops a demand for drugs
h. Java - no real problem drugwise
i. Harrison Act - illicit narcotic traffic
j. poisoning
k. sedative and depressant
l. socially acceptable - can cause problems
m. distortions of space, color, sound as psychedelic mind expansion
n. in drugs, one which acts on central nervous system
o. a condition arising from repeated administration of a drug
p. must increase dosage to get same effect
q. non-habit forming drugs
r. completely outlawed in the United States
s. quiets or calms
t. dangerous to the body
u. hallucinogen
v. illegal sale or use
w. legally - opium, cocaine, and opiates

____ 26. Severe penalties

x. drug addiction

y. sometimes dangerous, sometimes not, usually uncomfortable

z. smokers may have "sticks" of

aa. acts like alcohol intoxication, but no odor on breath

Matching Definitions and Terms
KEY

1. Alcohol-socially acceptable, can cause problems
2. Caffeine-Java, no real problem drugwise
3. Barbiturate-sedative and depressant
4. Depressant-in drugs, one that acts on central nervous system
5. Sedative-quiets or calms
6. Amphetamine-stimulant
7. Habituation-psychological dependence
8. Marihuana-smokers may have "sticks" of
9. Addiction-physical or psychological dependence
10. Convulsions-violent contractions of muscles
11. Delirium-mental excitement, often hallucinations
12. Depressant drug abuser-acts like alcohol intoxication, but no odor on breath
13. Drug depressant-a condition arising from repeated administrations of a barbiturate
14. Poisonous-dangerous to the body
15. Hallucinogen-distortions of space, color, sound as psychedelic mind expansion
16. Physical dependence-body develops continuing need for drug
17. Narcotic-legally, opium, cocaine, and opiates
18. Side effects of drugs-often dangerous, often not dangerous, usually uncomfortable
19. Tolerance-body must receive increased dosage of drugs to get same effect
20. Toxic effect-poisoning
21. LSD- hallucinogen
22. Federal control- Harrison Act, illicit narcotic traffic
23. Antipsychotic tranquilizers- non-habit forming drugs
24. Heroin-completely outlawed in United States
25. Personality change-drug addiction or illness
26. Severe penalties-illegal sale and use

Teacher Resource # 21

SOCIAL PROBLEMS

A. Definition and relevant facts. Social problems are conditions affecting many people in ways thought harmful, but avoidable through social action. Contrary to widespread but fallacious belief:

1. people do not agree upon which conditions are problems;
2. problems are not natural or inevitable;
3. problems are not abnormal, but are normal results of our social arrangements;
4. problems arise from social arrangements, not from "bad" people, and the "badness" of the people involved should usually be viewed as a symptom or result rather than the cause of the problem;
5. problems are genuine and are not illusions created by wild talk;
6. many people do not actually want certain problems solved;
7. most problems do not solve themselves or die out as time passes;
8. "getting the facts" will rarely solve a problem because people hold different values and want different outcomes;
9. problems cannot be thoroughly solved without major changes in present social institutions and practices.

B. Attitudes. Different persons hold different attitudes toward social problems. Some are:

1. indifferent and uninterested;
2. fatalistically resigned, accepting social problems as unavoidable scourges to be endured with patience;
3. cynical in their belief that the victims of problems are not worth helping and that the reformers are corrupt and venal;
4. believers in religious retribution, that problems result as divine punishment for man's misdeeds.

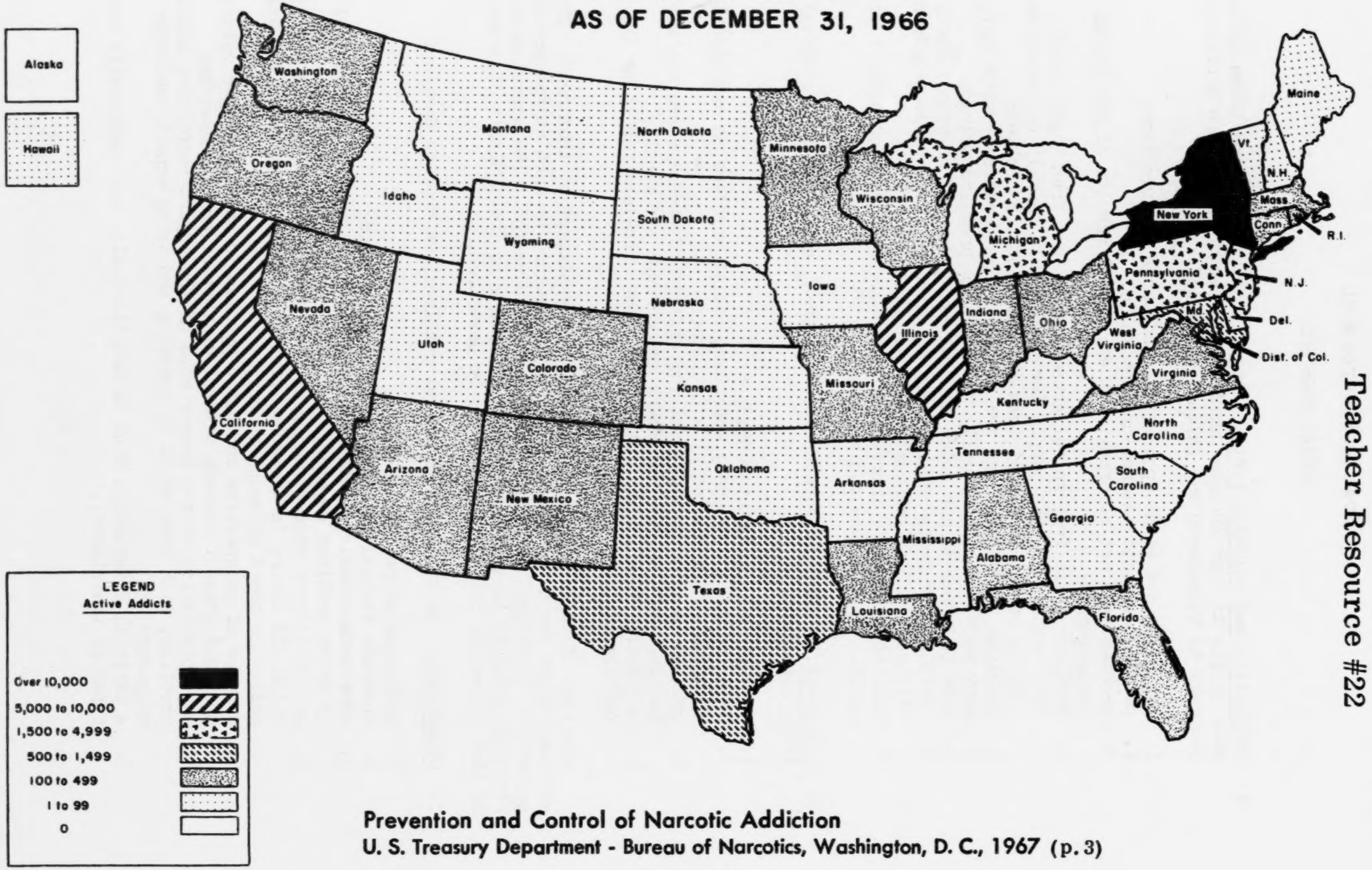
All four of these attitudes discourage any attempt at treatment. The sentimentalist wants to do something, but is guided by emotion rather than scientific knowledge, and his efforts are often wasted. The social-scientific attitude attempts to apply scientific technique to the analysis of a problem so that effective social policies may be developed.

C. Objectives. In our study of social problems, we hope to develop:

1. awareness of present problems;
2. accurate factual knowledge about some of them;
3. some understanding of their sociological origins, of the general way in which problems develop;
4. an intelligent understanding of the relation of theory and practice in which all theory is tested by practical application while all practical policy is based on sound theory;
5. a sense of perspective so that a problem is seen in proper relation to past and present society without distortion or exaggeration;
6. an appreciation of the proper role of the expert respecting social problems, with some skill in locating and using expert knowledge and opinions;
7. a personal orientation that is intellectually and emotionally satisfying to the student.

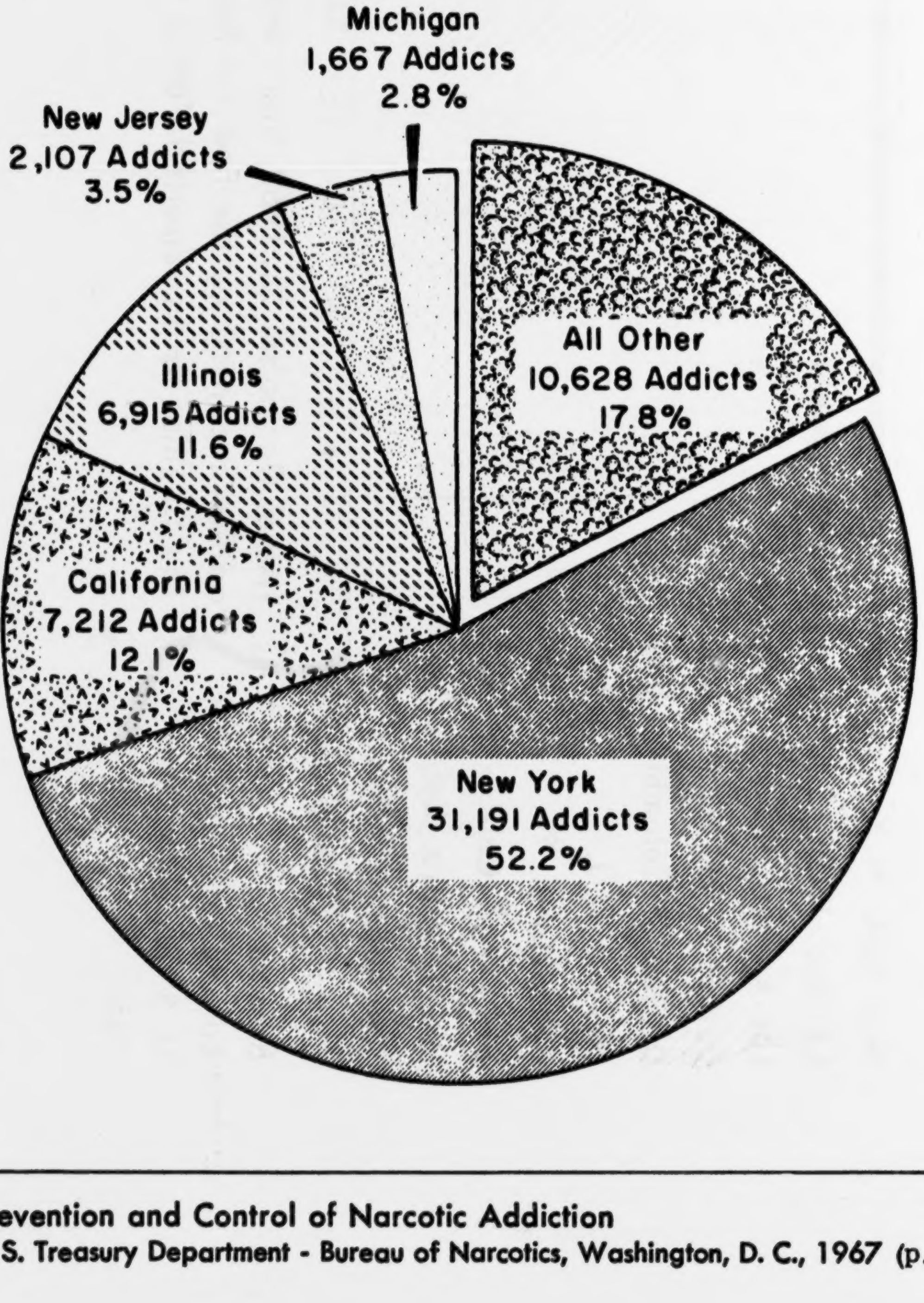
Teacher Resource #22

ACTIVE NARCOTIC ADDICTS
IN THE UNITED STATES
AS OF DECEMBER 31, 1966



Prevention and Control of Narcotic Addiction
U. S. Treasury Department - Bureau of Narcotics, Washington, D. C., 1967 (p. 3)

Teacher Resource #23



U.S. Bureau of Narcotics

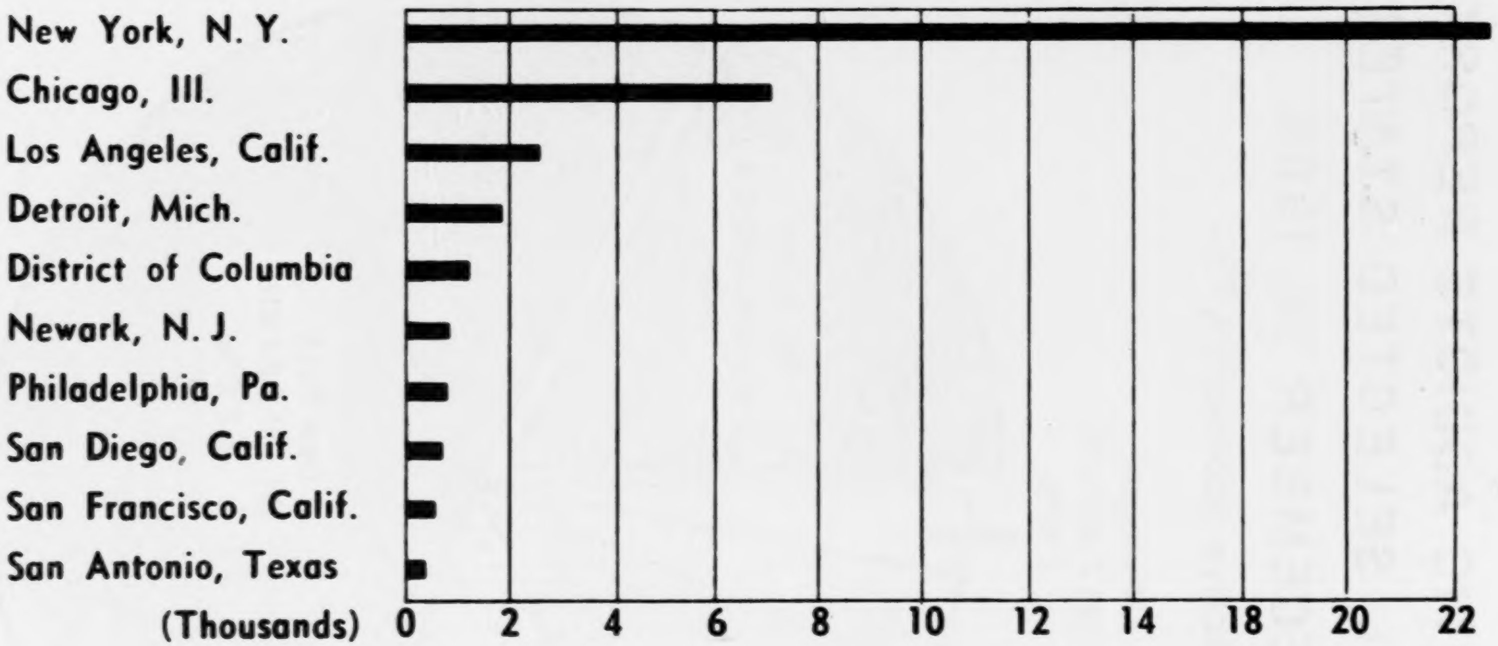
ACTIVE NARCOTIC ADDICTS REPORTED IN SEVERAL SELECTED STATES AS OF DECEMBER 31, 1966

Total Active Addicts 59,720

Prevention and Control of Narcotic Addiction
U. S. Treasury Department - Bureau of Narcotics, Washington, D. C., 1967 (p. 5)

Teacher Resource #24

TEN U. S. CITIES LEADING IN NUMBER OF ACTIVE NARCOTIC ADDICTS AS OF DECEMBER 31, 1963



Source:
Bureau of Narcotics,
U. S. Treasury Dept.

(As of December 31, 1963, there were 48,535 active addicts recorded by the Federal Bureau of Narcotics. The 10 cities listed reported 78%of this figure.)

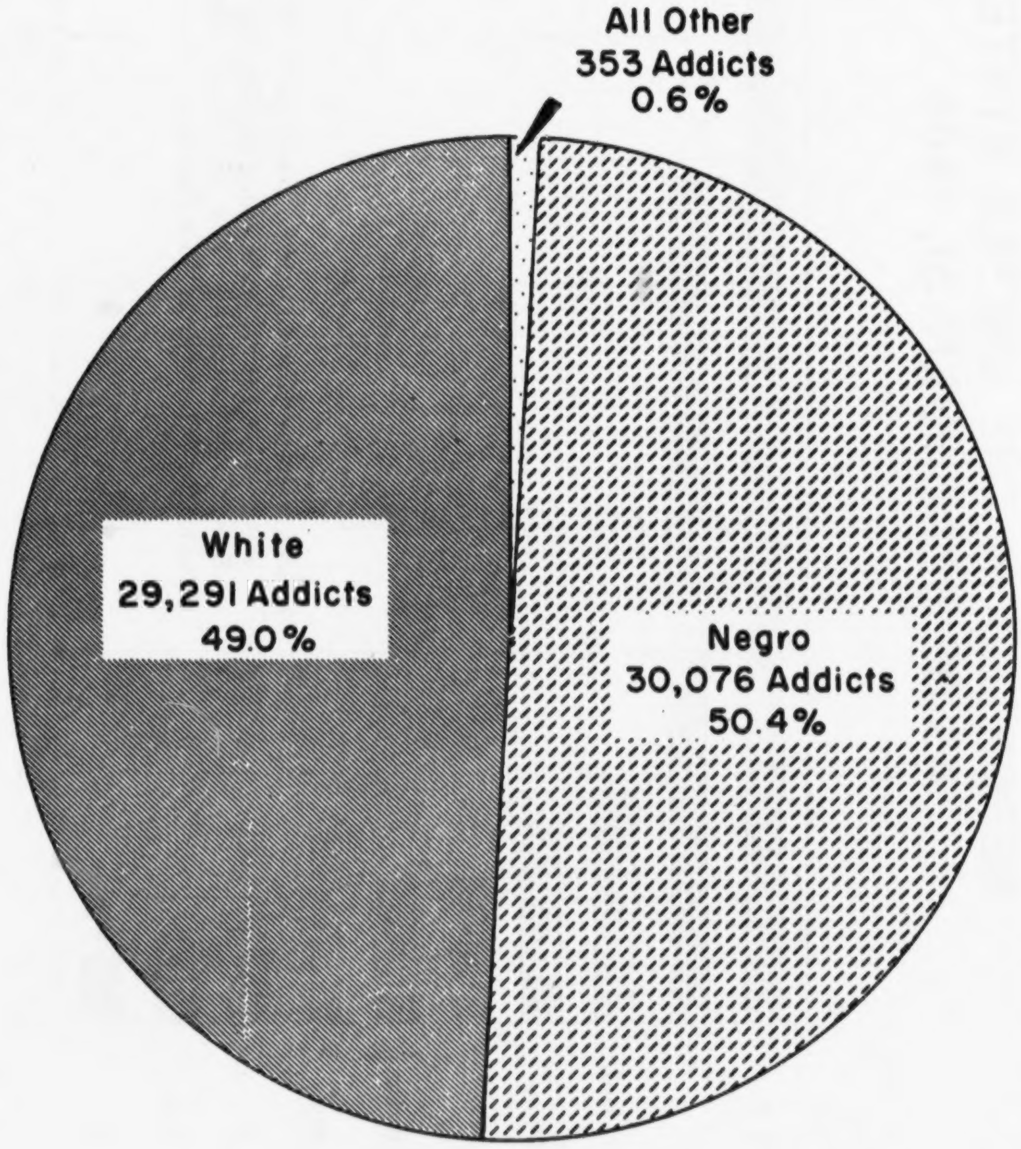
Prevention and Control of Narcotic Addiction
U. S. Treasury Department - Bureau of Narcotics, Washington, D. C., 1967

Teacher Resource #26

U.S. Bureau of Narcotics

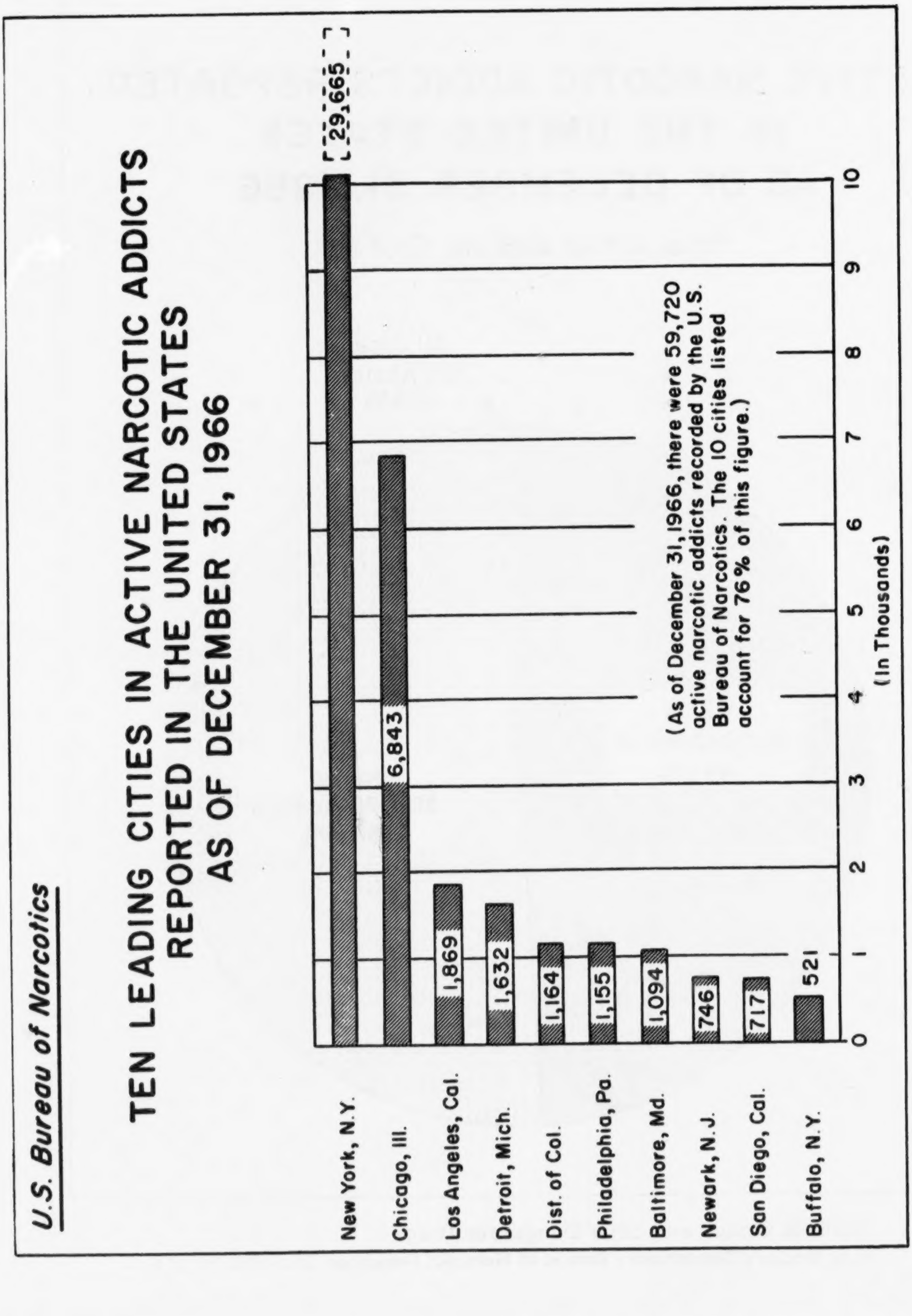
**ACTIVE NARCOTIC ADDICTS REPORTED
IN THE UNITED STATES
AS OF DECEMBER 31, 1966**

Total Active Addicts 59,720



Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 51)

Teacher Resource #25


U.S. Bureau of Narcotics

TEN LEADING CITIES IN ACTIVE NARCOTIC ADDICTS REPORTED IN THE UNITED STATES AS OF DECEMBER 31, 1966

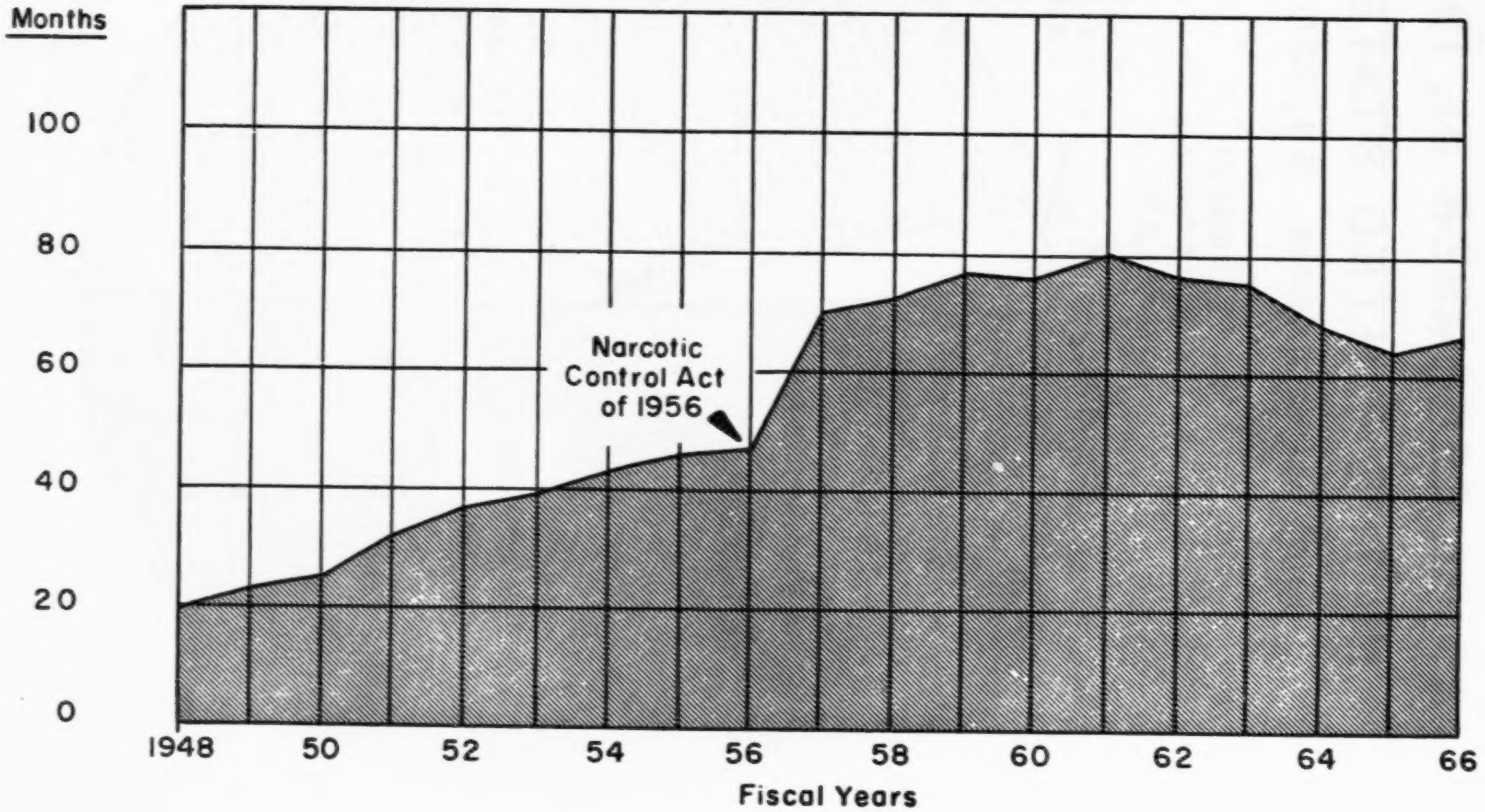
(As of December 31, 1966, there were 59,720 active narcotic addicts recorded by the U.S. Bureau of Narcotics. The 10 cities listed account for 76% of this figure.)

Prevention and Control of Narcotic Addiction
U. S. Treasury Department - Bureau of Narcotics, Washington, D. C., 1967 (p. 28)

Teacher Resource #28

U.S. District Courts

AVERAGE LENGTH OF NARCOTIC SENTENCES IN U.S. DISTRICT COURTS FISCAL YEARS 1948-1966



Data Source: Administrative Office, U.S. Courts.

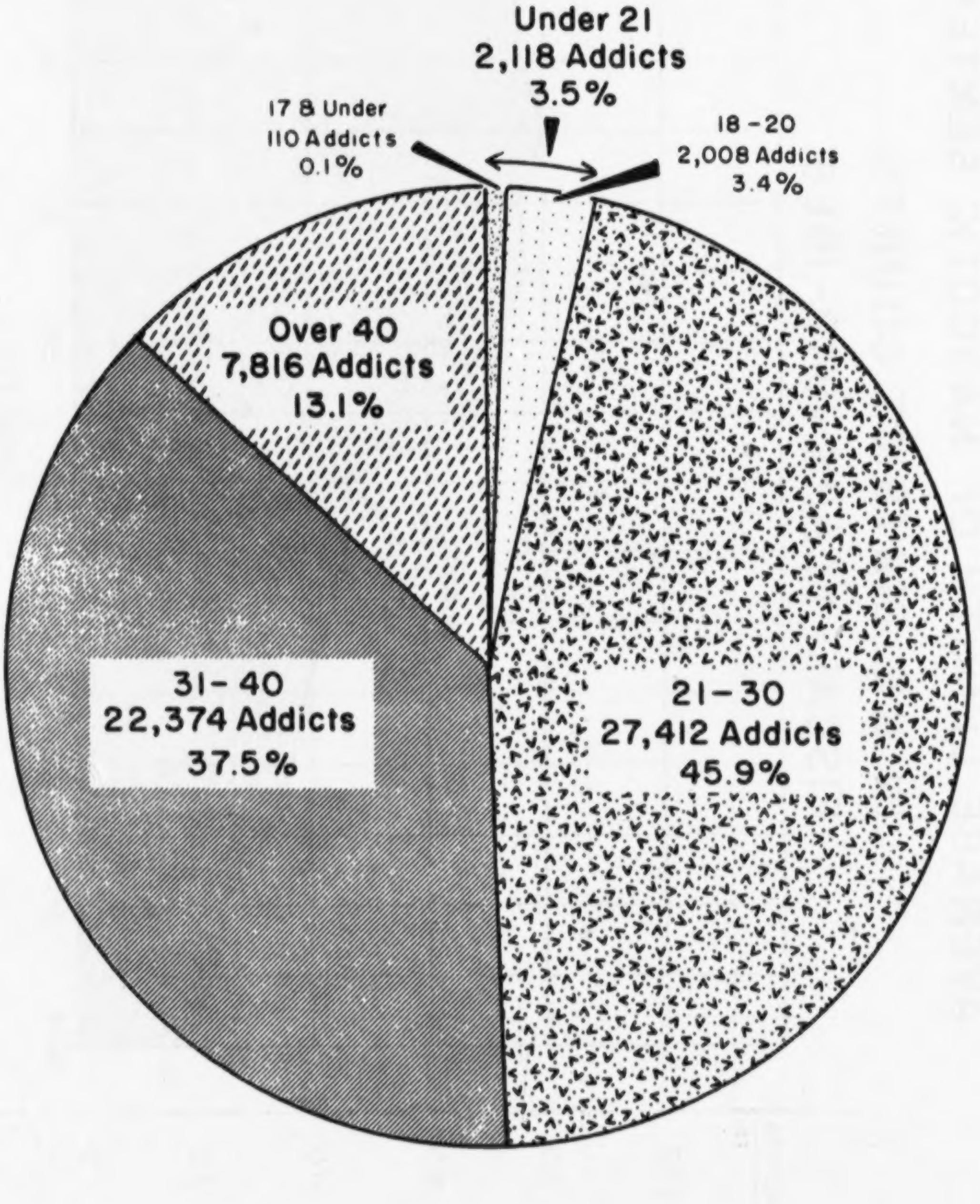
Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 54)

Teacher Resource #27

U.S. Bureau of Narcotics

AGE OF ACTIVE NARCOTIC ADDICTS AS OF DECEMBER 31, 1966 IN THE UNITED STATES

Total Active Addicts 59,720



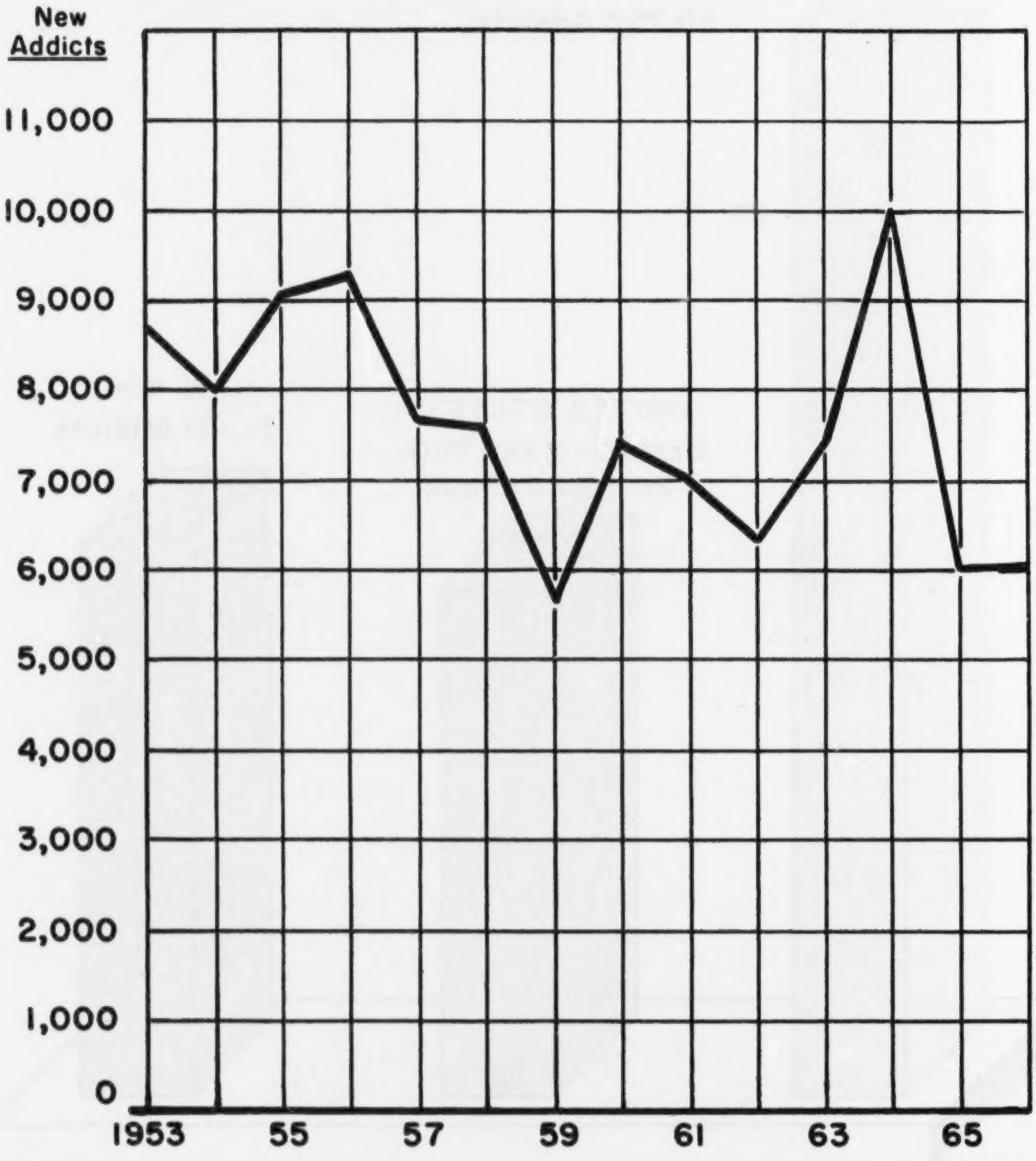
Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 52)

Teacher Resource #29

U.S. Bureau of Narcotics

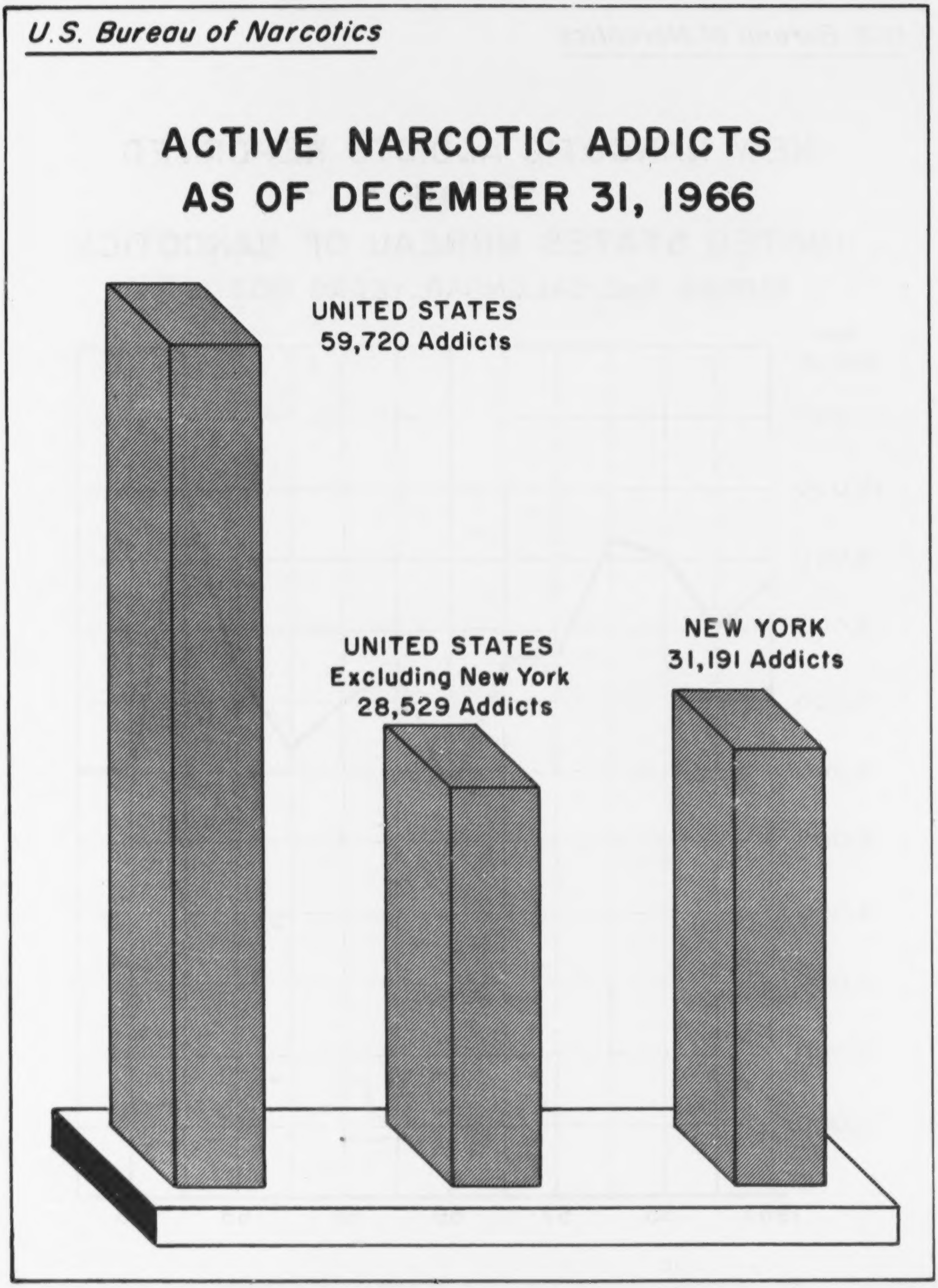
NEW NARCOTIC ADDICTS REPORTED TO THE UNITED STATES BUREAU OF NARCOTICS

DURING THE CALENDAR YEARS 1953-1966



Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 55)

Teacher Resource #31



U.S. Bureau of Narcotics

ACTIVE NARCOTIC ADDICTS AS OF DECEMBER 31, 1966

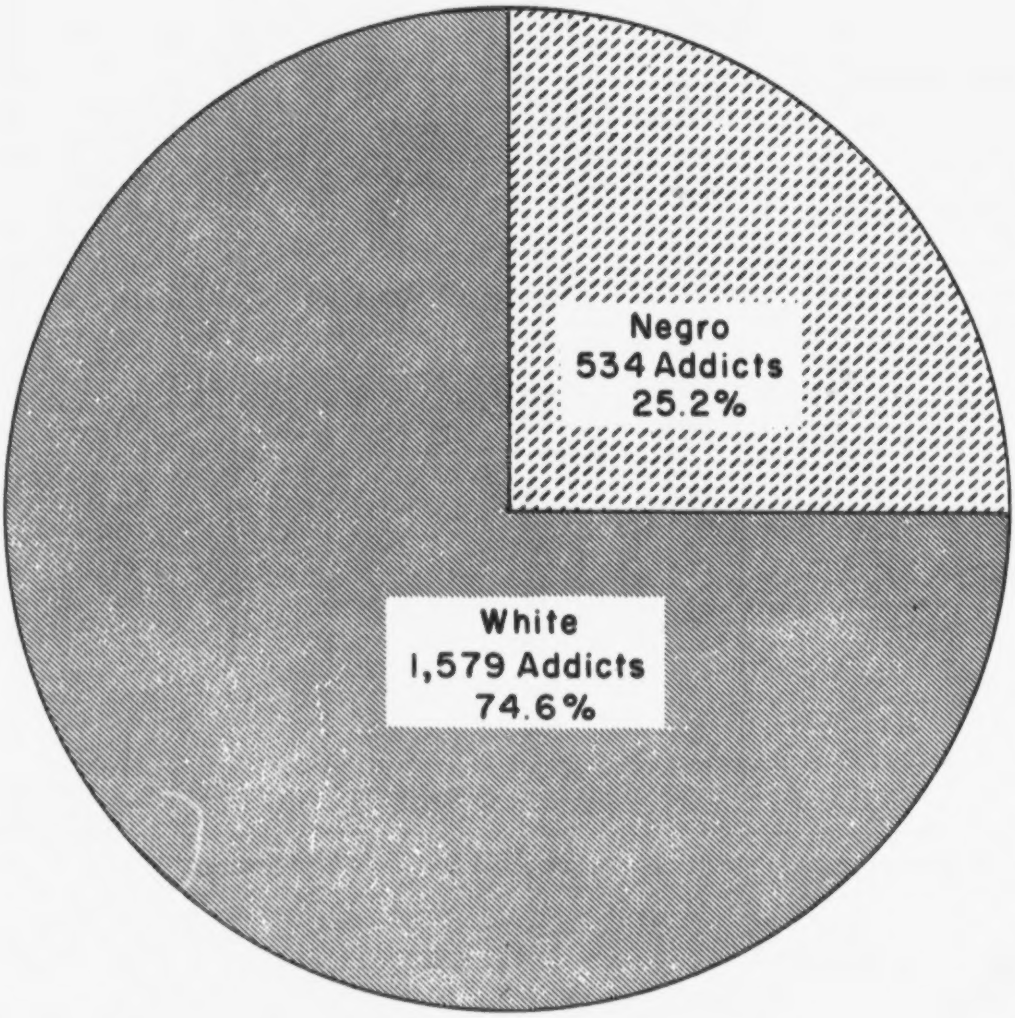
Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 50)

Teacher Resource #30

U.S. Bureau of Narcotics

ACTIVE NARCOTIC ADDICTS IN THE UNITED STATES UNDER 21 YEARS OF AGE AS OF DECEMBER 31, 1966

Total Active Addicts Under 21 — 2,118



All Other - 5 Addicts (0.2%)

Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 53)

Teacher Resource #32a

TABLE 2.—*Yearly production and use of the principal narcotic drugs, 1960–65*—Continued

[In kilograms]

Name of drug	*Period*	*Production*	*Total dispositions*	*Exported to other countries*	*Used in exempted preparations*	*Sold to hospitals, pharmacies, physicians, etc.*
Papaverine [1]	1961	2,330	3,196	24	1,931	1,241
	1962	2,393	2,560	--------	2,187	373
	1963	3,935	3,997	--------	3,559	438
	1964	8,091	6,191	--------	5,932	259
	1965	13,419	12,485	--------	12,223	262
Cocaine	1961	795	800	363	--------	437
	1962	635	636	120	--------	516
	1963	736	705	274	--------	431
	1964	1,171	1,236	795	--------	441
	1965	1,081	1,073	644	--------	429
Pethidine (Demerol)	1961	10,541	8,392	322	--------	8,070
	1962	11,901	13,127	317	--------	12,810
	1963	11,615	10,368	359	--------	10,009
	1964	11,807	13,566	209	--------	13,357
	1965	13,055	10,830	505	--------	10,325
Anileridine	1961	--------	628	24	--------	604
	1962	416	314	25	--------	289
	1963	260	296	23	--------	273
	1964	379	336	41	--------	295
	1965	287	311	34	--------	277
Methadone	1961	90	112	--------	--------	112
	1962	62	122	--------	--------	122
	1963	70	85	--------	--------	85
	1964	87	101	--------	--------	100
	1965	80	106	1	--------	105
Alphaprodine (Nisentil)	1961	--------	39	4	--------	35
	1962	40	41	5	--------	36
	1963	46	43	5	--------	38
	1964	41	46	6	--------	40
	1965	50	49	6	--------	43
Levorphanol	1961	9	9	1	--------	8
	1962	13	7	1	--------	6
	1963	--------	8	--------	--------	8
	1964	13	11	1	--------	10
	1965	--------	12	--------	--------	12
Piminodine	1961	386	71	55	--------	16
	1962	128	74	2	--------	72
	1963	80	155	1	--------	154
	1964	--------	59	--------	--------	59
	1965	--------	49	--------	--------	49

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[1] Principally synthetic, small quantities are extracted from opium processes.

Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 44)

Teacher Resource #32b

TABLE 2.—*Yearly production and use of the principal narcotic drugs, 1960–65*

[In kilograms]

Name of drug	*Period*	*Production*	*Total dispositions*	*Exported to other countries*	*Used in exempted preparations*	*Sold to hospitals, pharmacies, physicians, etc.*
Medicinal opium	1961	5,399	3,886	5	2,325	1,556
	1962	3,285	3,939	4	2,579	1,356
	1963	3,850	3,901	15	1,991	1,895
	1964	3,251	3,171	13	1,854	1,314
	1965	3,416	3,433	12	2,105	1,316
Morphine	1961	812	859	21	28	810
	1962	465	666	11	17	638
	1963	540	651	10	18	623
	1964	453	643	15	13	615
	1965	534	504	13	13	478
Hydromorphone (Dihydromorphinone)	1961	83	48	--------	--------	48
	1962	73	51	1	--------	50
	1963	58	51	--------	--------	51
	1964	26	55	1	--------	54
	1965	36	54	--------	--------	54
Oxymorphine (Numorphan)	1961	3	2	--------	--------	2
	1962	5	15	--------	--------	15
	1963	19	13	--------	--------	13
	1964	12	14	--------	--------	14
	1965	18	19	--------	--------	19
Ethylmorphine	1961	119	116	62	12	42
	1962	174	176	93	14	69
	1963	80	88	11	13	64
	1964	140	143	68	9	66
	1965	173	182	125	8	49
Codeine	1961	24,516	21,958	250	8,678	13,030
	1962	26,673	27,379	153	10,118	17,108
	1963	26,637	24,610	95	9,771	14,744
	1964	23,756	24,876	154	9,667	15,055
	1965	29,524	27,241	342	9,957	16,942
Dihydrocodeine	1961	2	33	--------	--------	33
	1962	16	41	--------	--------	41
	1963	60	52	--------	--------	52
	1964	17	42	--------	--------	42
	1965	53	55	--------	--------	55
Hydrocodone (Dihydrocodeinone)	1961	352	682	31	6	645
	1962	354	474	26	--------	448
	1963	472	440	25	--------	415
	1964	429	447	22	--------	425
	1965	524	506	47	--------	459
Oxycodone (Eucodal)	1961	380	433	4	--------	429
	1962	506	555	5	--------	550
	1963	794	607	6	--------	601
	1964	498	591	10	--------	581
	1965	596	573	10	--------	563

Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 43)

Teacher Resource #33

TABLE 13.—*Active narcotic addicts in the United States as of Dec. 31, 1965, and Dec. 31, 1966, by State*

	Active	
	Dec. 31, 1965	*Dec. 31, 1966*
Alabama	166	160
Alaska	------	------
Arizona	195	157
Arkansas	46	50
California	6, 836	7, 212
Colorado	326	305
Connecticut	355	449
Delaware	31	21
District of Columbia	1, 116	1, 164
Florida	381	439
Georgia	79	66
Hawaii	52	54
Idaho	5	3
Illinois	7, 330	6, 915
Iindiana	430	389
Iowa	15	14
Kansas	34	15
Kentucky	83	71
Louisiana	206	193
Maine	6	6
Maryland	934	1, 192
Massachusetts	436	490
Michigan	1, 700	1, 667
Minnesota	159	172
Mississippi	54	56
Missouri	382	364
Montana	24	16
Nebraska	17	16
Nevada	40	116
New Hampshire	4	3
New Jersey	1, 762	2, 107
New Mexico	434	490
New York	29, 510	31, 191
North Carolina	58	55
North Dakota	5	6
Ohio	473	453
Oklahoma	81	83
Oregon	106	123
Pennsylvania	1, 461	1, 554
Rhode Island	132	202
South Carolina	50	39
South Dakota	10	11
Tennessee	107	87
Texas	1, 110	1, 083
Utah	7	37
Vermont	2	2
Virginia	170	146
Washington	168	132
West Virginia	10	13
Wisconsin	95	124
Wyoming	6	7
Total	57, 199	59, 720

Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 56)

Teacher Resource #34

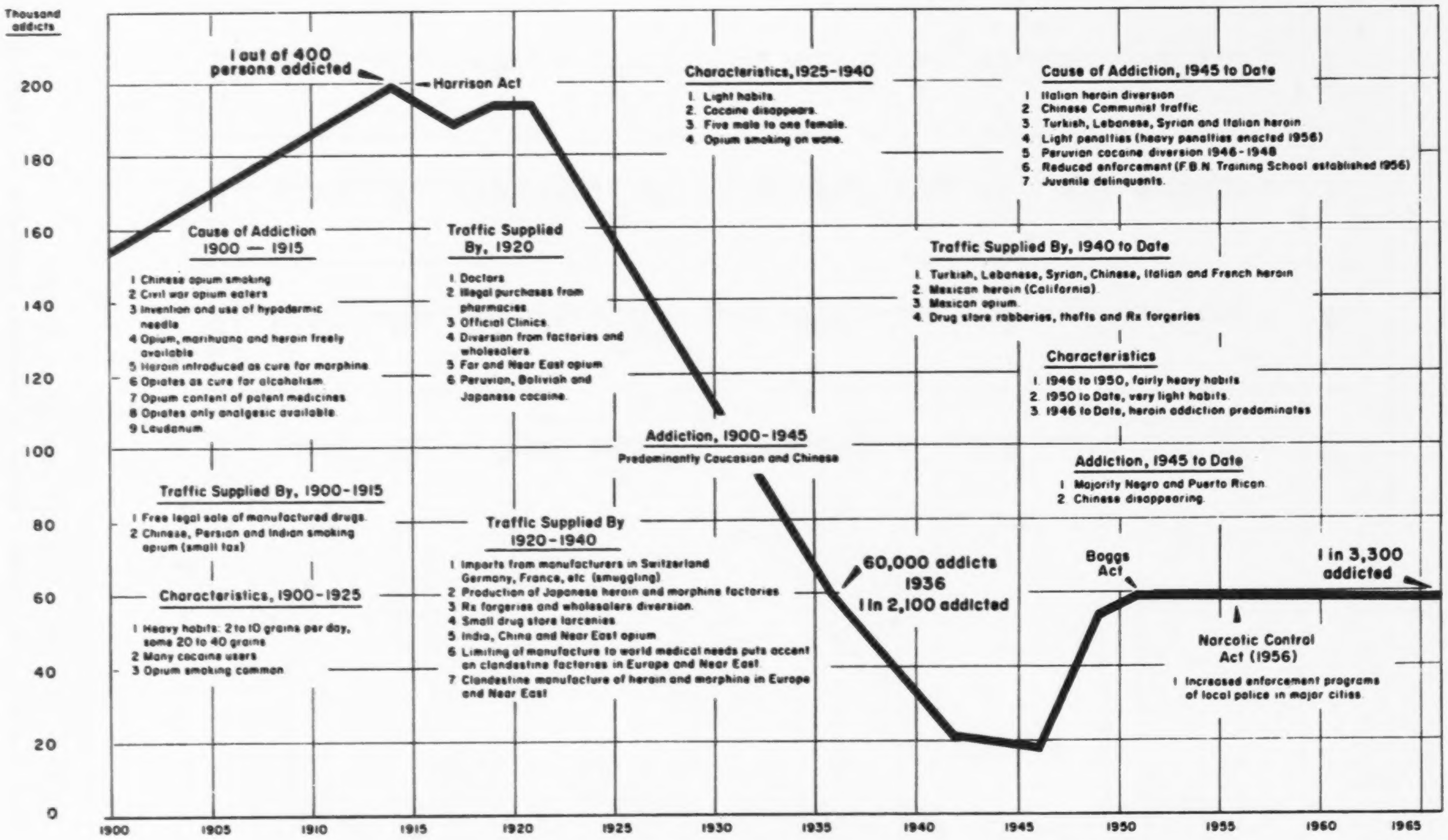
Table 15.—*New narcotic addicts reported to the U.S. Bureau of Narcotics during the calendar years 1962–66*

	1962	*1963*	*1964*	*1965*	*1966*
Alabama	44	21	22	13	10
Alaska	--------	--------	--------	--------	--------
Arizona	35	38	14	20	20
Arkansas	2	4	11	16	4
California	902	697	691	1,032	566
Colorado	76	52	56	24	19
Connecticut	143	54	19	54	106
Delaware	1	1	5	2	2
District of Columbia	127	133	87	150	120
Florida	20	13	71	75	75
Georgia	6	8	19	13	4
Hawaii	8	13	5	3	4
Idaho	--------	1	--------	1	--------
Illinois	865	753	652	504	386
Indiana	69	50	56	31	26
Iowa	2	4	6	--------	1
Kansas	2	2	5	1	1
Kentucky	7	13	22	9	2
Louisiana	33	25	38	18	26
Maine	1	4	--------	--------	--------
Maryland	58	84	203	332	277
Massachusetts	95	92	63	28	83
Michigan	180	207	194	75	99
Minnesota	22	33	39	28	18
Mississippi	23	11	6	2	5
Missouri	43	29	44	29	45
Montana	9	2	1	1	1
Nebraska	--------	9	1	--------	4
Nevada	3	6	3	11	50
New Hampshire	--------	1	2	--------	--------
New Jersey	210	225	355	378	406
New Mexico	75	105	85	74	37
New York	2,480	4,213	6,580	2,662	3,113
North Carolina	22	16	6	--------	2
North Dakota	1	--------	1	--------	1
Ohio	67	105	43	62	40
Oklahoma	26	19	12	5	6
Oregon	22	26	14	15	23
Pennsylvania	297	120	353	130	171
Rhode Island	--------	58	25	38	58
South Carolina	6	1	26	4	--------
South Dakota	--------	1	2	2	--------
Tennessee	45	16	6	7	4
Texas	274	107	110	129	154
Utah	--------	2	1	4	20
Vermont	--------	--------	--------	1	--------
Virginia	19	18	27	19	14
Washington	34	35	11	5	14
West Virginia	3	--------	2	1	3
Wisconsin	6	24	18	3	27
Wyoming	--------	5	--------	1	--------
Total	6,363	7,456	10,012	6,012	6,047

Traffic in Opium and other Dangerous Drugs
U. S. Treasury Department - Bureau of Narcotics December 31, 1966 (p. 58)

Teacher Resource #35

HISTORY OF NARCOTIC ADDICTION IN THE UNITED STATES



1 out of 400 persons addicted

60,000 addicts
1936
1 in 2,100 addicted

1 in 3,300 addicted

Cause of Addiction 1900 — 1915

1 Chinese opium smoking
2 Civil war opium eaters
3 Invention and use of hypodermic needle
4 Opium, marihuana and heroin freely available
5 Heroin introduced as cure for morphine
6 Opiates as cure for alcoholism
7 Opium content of patent medicines
8 Opiates only analgesic available
9 Laudanum

Traffic Supplied By, 1920

1 Doctors
2 Illegal purchases from pharmacies
3 Official Clinics
4 Diversion from factories and wholesalers
5 Far and Near East opium
6 Peruvian, Boliviah and Japanese cocaine.

Characteristics, 1925-1940

1. Light habits.
2. Cocaine disappears.
3. Five male to one female.
4. Opium smoking on wane.

Cause of Addiction, 1945 to Date

1 Italian heroin diversion
2 Chinese Communist traffic
3 Turkish, Lebanese, Syrian and Italian heroin
4 Light penalties (heavy penalties enacted 1956)
5 Peruvian cocaine diversion 1946-1948
6 Reduced enforcement (F.B.N. Training School established 1956)
7 Juvenile delinquents.

Traffic Supplied By, 1940 to Date

1. Turkish, Lebanese, Syrian, Chinese, Italian and French heroin
2. Mexican heroin (California).
3. Mexican opium.
4. Drug store robberies, thefts and Rx forgeries

Characteristics

1. 1946 to 1950, fairly heavy habits
2. 1950 to Date, very light habits.
3. 1946 to Date, heroin addiction predominates

Addiction, 1900-1945

Predominantly Caucasian and Chinese

Addiction, 1945 to Date

1 Majority Negro and Puerto Rican.
2 Chinese disappearing.

Traffic Supplied By, 1900-1915

1 Free legal sale of manufactured drugs.
2 Chinese, Persian and Indian smoking opium (small tax)

Characteristics, 1900-1925

1 Heavy habits: 2 to 10 grains per day, some 20 to 40 grains
2 Many cocaine users
3 Opium smoking common

Traffic Supplied By 1920-1940

1 Imports from manufacturers in Switzerland Germany, France, etc (smuggling)
2 Production of Japanese heroin and morphine factories
3 Rx forgeries and wholesalers diversion.
4 Small drug store larcenies
5 India, China and Near East opium
6 Limiting of manufacture to world medical needs puts accent on clandestine factories in Europe and Near East
7 Clandestine manufacture of heroin and morphine in Europe and Near East

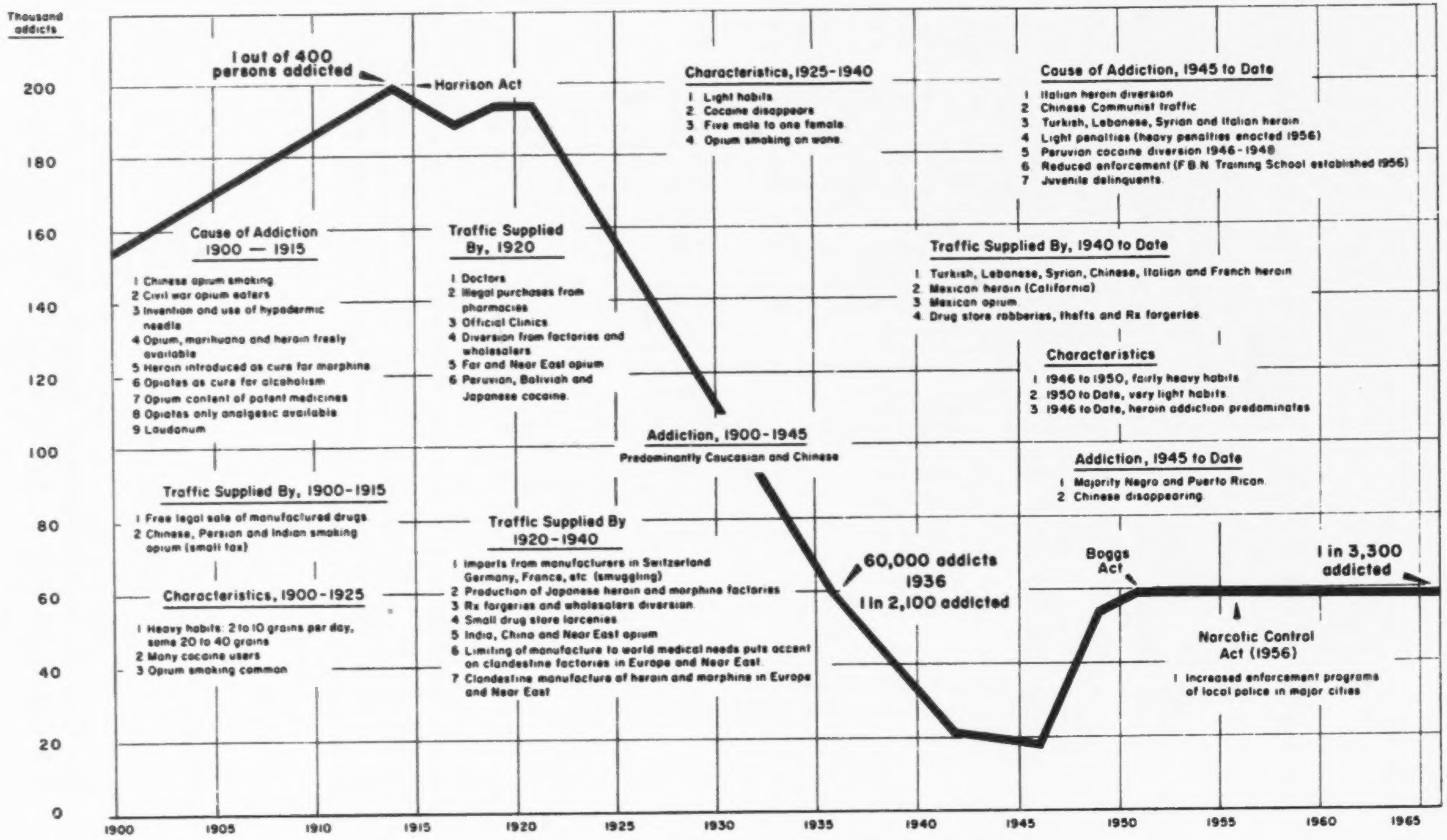
Narcotic Control Act (1956)

1 Increased enforcement programs of local police in major cities.

Prevention and Control of Narcotic Addiction
U. S. Treasury Department - Bureau of Narcotics, Washington, D. C., 1967 (p. 2)

Teacher Resource #35

HISTORY OF NARCOTIC ADDICTION IN THE UNITED STATES



Prevention and Control of Narcotic Addiction
U. S. Treasury Department - Bureau of Narcotics, Washington, D. C., 1967 (p. 2)

Teacher Resource #36

Table 1—Age Distribution of Persons Arrested for Narcotics Offenses in U.S. Cities 1940–62

Year	Median age	Percentage distribution by age group										Total cases reported (100 percent)
		Under 16	16	17	18	19	20–24	25–29	30–39	40–49	50 and over	
1962	27.2	3.8	1.7	2.5	3.1	3.9	25.2	22.6	27.1	7.2	2.9	29,068
1961	26.3	2.7	1.5	2.6	3.5	4.3	27.2	22.5	25.7	6.8	3.3	25,080
1960	27.2	.8	1.2	2.1	3.4	4.2	27.5	24.4	26.7	6.4	3.2	23,430
1959	27.8	.9	1.2	2.2	3.2	3.5	25.0	24.6	28.4	7.7	3.3	10,562
1958	27.8	.9	1.1	1.9	2.9	3.5	24.8	26.3	27.1	7.7	3.9	9,863
1957	27.8	.5	.8	1.8	2.6	3.2	25.6	27.9	25.9	7.8	3.9	7,277
1956	27.3	.8	1.3	1.9	2.4	3.2	27.3	28.6	23.0	7.4	3.9	7,289
1955	27.7	.9	1.0	1.7	2.3	3.1	27.2	27.9	24.6	8.0	4.3	6,888
1954	27.5	.4	.7	1.3	2.8	3.5	27.3	27.8	23.0	8.3	4.9	6,634
1953	26.7	.9	1.2	2.1	3.6	4.7	28.8	25.5	20.6	8.1	4.5	5,681
1952	27.3	.4	.8	2.0	2.9	3.4	30.4	23.7	23.6	9.3	5.5	3,013
1951	26.0	.3	1.0	2.3	4.1	5.3	32.5	22.5	19.0	8.3	4.5	13,030
1950	26.3	.3	.9	1.8	3.6	5.6	32.6	21.0	19.5	9.5	5.5	8,539
1949	27.2	.1	.4	1.0	3.4	5.1	31.1	19.9	21.7	11.5	5.7	6,546
1948	27.5	.1	.4	.9	4.5	5.9	28.8	18.6	21.7	12.9	6.0	4,846
1947	28.6	.1	.4	1.0	4.1	6.1	25.4	17.8	23.6	14.4	6.7	3,388
1946	30.2	.1	.3	1.2	3.3	3.7	22.4	18.5	25.9	16.9	7.5	2,807
1945	32.6	.1	.4	1.0	3.2	3.3	18.9	15.3	29.2	18.9	9.9	1,935
1944	33.6	.1	.2	1.2	2.1	2.6	17.9	15.7	28.8	21.3	10.2	1,731
1943	34.4	.2	.4	.7	1.8	2.6	15.0	16.9	28.1	23.6	10.7	1,361
1942	35.5	.2	.4	.7	2.3	1.5	12.0	15.8	31.2	26.0	9.8	1,123
1941	31.3	.2	.3	1.3	2.2	3.3	19.8	19.4	27.8	16.2	7.5	2,593
1940	31.3	.2	.5	.8	2.3	2.9	20.2	19.5	28.0	17.5	8.1	5,014

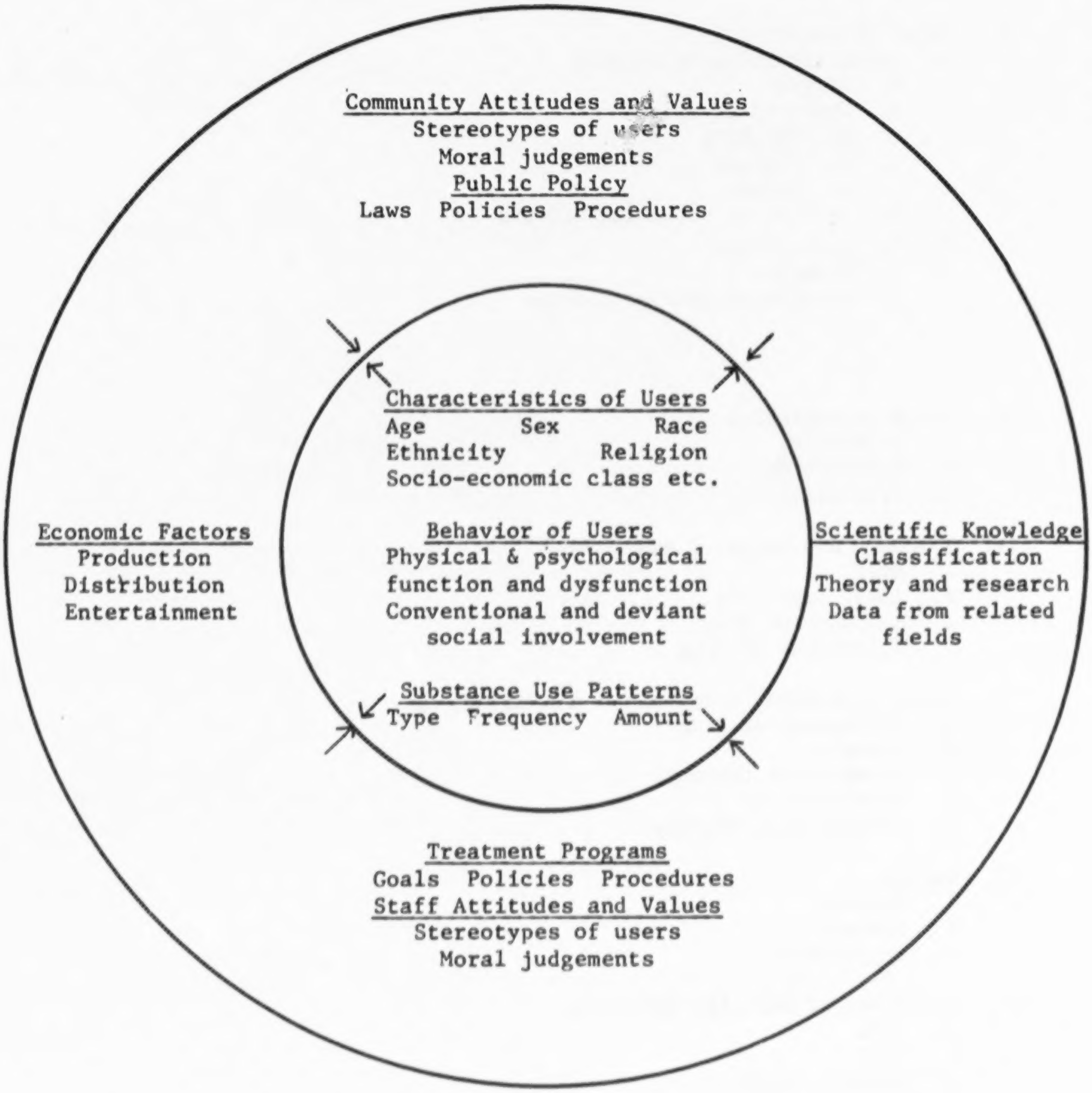
Compiled from Federal Bureau of Investigation, *Uniform Crime Reports*. Note that before 1952 these figures were compiled by the FBI from individual arrest reports submitted for its fingerprint files, while from 1952 on, the reports were compiled by the separate police departments, then submitted as annual tabulations. A progressive increase in the number of cooperating police departments occurred in both the pre- and post-1952 periods, except for war years.

The Control and Treatment of Narcotic Use
U. S. Department of Health Education and Welfare Administration (p. 8)

Teacher Resource #37

"Graphic Representation of the Overall Social-Problem Field of Narcotic Addiction"

CHART I



A Community Mental Health Approach to Drug Addiction.

U. S. Department of Health Education and Welfare

Teacher Reference # 38
Tape Summary
NARCOTICS -- TUEMMLER

I. Non-narcotics, acting on the central nervous system
   A. Analgesics
   B. General anesthetics
   C. Hypnotic drugs
   D. Barbiturates
   E. Marihuana
      1. Origin
      2. Effects on user

II. Types of narcotics
   A. Opium alkaloids or opiates
      1. Origin
      2. Products of opium
         a. Morphine
         b. Codeine
         c. Heroin
      3. Methods of obtaining effects
   B. Synthetic drugs
      1. Example
      2. Purpose of synthetic drugs

III. Steps to addiction
   A. Tolerance
   B. Habituation
   C. Dependency

IV. Symptoms and signs of addiction
   A. Eyes
   B. Arms, legs, etc.
   C. Response to drug
   D. Withdrawal of drug

V. Cures -- Federal hospitals -- Lexington, Ky.
   A. Withdrawal of drug
   B. Placebo
   C. Psychiatric therapy
   D. Substitution
   E. Occupational therapy

VI. Causes
   A. Medical
   B. Pushers
   C. Psychiatric

VII. Incidence of narcotic addiction
   A. 1924
   B. 1937
   C. Egypt -- 1930
   D. World War II
   E. Legal action

Teacher Resource # 39A
Tape Summary

Talk on Drug Addiction

at Woodlawn Senior High School in 1967

by Gerald Siegel

Chairman of the Maryland Commission to Study
Problems of Drug Addiction

Mr. Siegel is talking about the causes of drug addiction with major emphasis on the non-narcotic drugs, barbiturates and amphetamines. He quotes figures related to narcotic addiction and its cost and the number of barbiturate and amphetamine pills manufactured and illegally sold each year in the United States. The effects of barbiturates and amphetamines on the human body are compared and contrasted. Barbiturates are more dangerous than amphetamines in that they cause all of the symptoms of narcotic addiction, tolerance, and psychological dependence. On the other hand, amphetamines cause emotional dependence but withdrawal is mild. However, a person under the influence of an overdose of amphetamines may do things dangerous to himself and others. Mr. Siegel states that attempts to cure addicts have been largely unsuccessful. Removing the drug does not remove the problem that caused addiction. The speaker is of the opinion that the brightest hope for a solution to the drug problem is a program of prevention through the education of children and adults. They should be educated not only about drugs but also about how to cope with life's problems.

Teacher Resource # 39B

Teacher Guide Questions

Talk on Drug Addiction

by

Gerald Siegel

1. Who misuses drugs?
2. What class of society is the major abuser of pills?
3. What has led to the myth that only slum residents use drugs?
4. How many narcotic addicts are there in the United States?
5. How much does it cost to support the narcotic habit each year?
6. What is the annual number of barbiturate and amphetamine pills manufactured legally in the United States each year?
7. How many of these pills are sold illegally?
8. How are barbiturates and amphetamines the same?
9. How are they different?
10. Describe the effects of the misuse of barbiturates.
11. What is the most realistic way to help prevent drug addiction?

Teacher Resource # 40A

Tape Summary

Forum Focus on LSD

by

Wolf and Bologna

This tape was made on May 10, 1967 at a student forum at Woodlawn Senior High School. Mr. Sidney Wolf, a research psychologist from Spring Grove, and Mr. Jack Bologna from the Bureau of Drug Abuse Control (Branch of Food and Drug Administration) were guest speakers at the forum.

Mr. Wolf's talk emphasizes the discovery of LSD and its medical applications. He describes contributions in LSD therapy that have been developed at Spring Grove State Hospital and the physiological and psychological effects of LSD. The variables that influence its outcome of use are also described.

Mr. Bologna's talk explains how the use of LSD for non-medical reasons has dangerous potential that makes control by the Bureau of Drug Abuse Control necessary.

TEACHER RESOURCE #40B

Teacher Guide Questions

Forum Focus on LSD

by
Sidney Wolf - Spring Grove State Hospital

1. What is the source of LSD?
2. Who discovered LSD? How? When?
3. What symptoms were experienced by the first person to ingest LSD?
4. How potent is LSD? Give examples.
5. What was the early use of LSD in medicine?
6. What is the latest medical use of LSD?
7. What is meant by "instant mysticism"?
8. What effect did LSD have on alcoholics?
9. What caused differences in the outcome from using LSD? What were the two variables?
10. Explain "set" and "setting."
11. How has LSD been used at Spring Grove?
12. What precautions are taken at Spring Grove when using LSD with patients?
13. How is LSD being used with terminal patients?

by
Jack Bologna - Bureau of Narcotics & Dangerous Drugs

1. What are the major concerns of BNDD officers?
2. What two courses of action do BNDD officers pursue?
3. What drugs are included in the hallucinogenic category of drugs?
4. What are the effects of LSD usage?
5. What contributed to wide misuse of LSD?
6. Why has illegal manufacture of LSD grown rapidly in recent years?
7. What effect did indiscriminate use of LSD have on the 70 patients treated at Neuro-Psychiatric Institute of University of California?

SUGGESTED READING LIST FOR ADULTS

Ausubel, David P. Drug Addiction. New York: Random House. 1966

Written in a relatively nontechnical style, this book gives an integrated treatment of drug addiction covering the pharmacological, psychiatric, psychological, sociological, and educational aspects. The author, a physician, based the book on a critical study of the literature.

Blum, Richard, et al. Utopiates. New York: Atherton Press. 1965

Each of the contributors in this book presents a major point of view about LSD use for the individual and society. The significance of it is an invitation to learn and think more about the phenomena of drug use and to begin to plan for social action.

Chein, Isidor, et al. The Road to H, Narcotics, Delinquency, and Social Policy. New York: Basic Books, Inc. 1964

The major emphasis is on narcotics use, developing a point of view related to legal, law enforcement, medical, and social aspects of the problem. Though the main purpose is to report on a study in New York City, modern philosophy offered by knowledgeable people is included. The study reveals the socio-psychological differences between drug abusers and non-users.

Mills, James. The Panic in Needle Park. New York: Farrar, Straus and Giroux, Inc. 1966

The characters are fictional; what happens is not an impossibility in the junkie world. The author, doing research for a Life series, immersed himself completely in the world of the addict.

O'Donnell, John A. and Ball, John C. (eds.). Narcotic Addiction. New York: Harper and Row. 1966

The purpose of this reader is to present the major contending viewpoints on narcotic addiction. The authors of the papers include a journalist, a law enforcement official, a sociologist, a psychologist, a pharmacologist, a psychiatrist, and several physicians.

Schaap, David. Turned On. New York: The New American Library. 1967

In this skillful "reporting" of the tragic experience of two young people, the author introduces concepts basic to the understanding of the drug abuse problem. It is as current as tomorrow's newspaper.

Yablonsky, Lewis. The Tunnel Back - Synanon. New York: The Macmillan Company. 1965

This is a description of the Synanon movement and its development in the area of drug addict rehabilitation. The book is concerned more with a solution to the problem than with the extent of the problem itself.

Free and Inexpensive Materials

Drug Abuse and You (Booklet) 75¢ Chronicle Guidance Publications, Inc.,
Moravia, New York 13118

Includes drug facts and reflections for purpose of stimulating cooperative efforts to understand the "drug movement."

Drugs of Abuse (Reprint) 20¢ Bureau of Narcotics and Dangerous Drugs, United
States Department of Justice, Inited
States Government Printing Office, Washington, D.C. 20402

Colorfully illustrated pamphlet about stimulants, depressants, and hallucinogens with a description of problems, laws concerning and effects of the various drugs.

Drugs on the College Campus (Booklet) Single copy free, 2 or more $1.00 each.
NASPA Drug Education Project, 110 Anderson
Tower, University of Rochester, Rochester,
New York 14627

Refers primarily to the use of drugs by college students, issues and implications, discussions of response of educational institutions as well as descriptions of selected drugs.

Narcotics and Drug Abuse (Booklet) $1.00 President's Commission on Law
Enforcement and Administration of Justice-
Task Force report.
Superintendent of Documents, Government Printing Office, Washington, D.C. 20402

Drug Education Project Paper Free NASPA Drug Education Project, 110 Anderson
Tower, University of Rochester, Rochester,
New York 14627

*Check F.D.A. Fact Sheet in teacher's kit for other available material.

Empty Promise (Reading List) Free Enoch Pratt Free Library, Baltimore,
Maryland 21201

Facts and myths about drugs, "cool talk about hot drugs," problem of drug abuse, treatment, narcotics and the law. Also describes three 16-mm sound films

Ticket to Hell (Reading List) Free Baltimore County Public Library, Special
Services Office, 25 W. Chesapeake Avenue, Towson,
Maryland 21204

Listing of magazine articles, books, films, and records about the misuse of drugs.

Recomendations for High School Libraries

(Listed in order of priority for purchase)

1. Lindesmith, Alfred R. The Addict and the Law. New York: Vintage Books V-384. 1967
2. Blum, Richard, et al. Utopiates. New York: Atherton Press. 1965
3. Cavan, Ruth Shoule. Readings in Juvenile Delinquency. Philadelphia and New York: J.B. Lippincott Co. 1964
4. Yablonsky, Lewis. The Tunnel Back-Synanon. New York: The Macmillan Company. 1965
5. Solomon, David. The Marihuana Papers. Indianapolis, Indiana: Bobbs-Merrill. 1966
6. Joint Committee of the American Bar Association and the American Medical Association on Narcotic Drugs. Drug Addiction: Crime or Disease. Bloomington: Indiana University Press. 1961
7. U.S. Task Force on Narcotics and Drug Abuse. Task Force Report: Narcotics and Drug Abuse. Washington: U.S. Printing Office. 1967
8. Harris, John D. The Junkie Priest. New York: Pocket Books. 1964
9. Duncan, Tommie L. Understanding and Helping the Narcotic Addict. Englewood Cliffs, New Jersey: Prentice-Hall Inc. 1965
10. Eldridge, William Butler. Narcotics and the Law. Chicago: University of Chicago Press. 1962
11. Time, Inc. The Drug Takers. New York: Time, Inc. 1965

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2.	Flagstaff Public Schools Grades K–12 **Catalog No. Prex 13.8:Ed 8/2**	**Price**	**65¢**
3.	Great Falls School District No. 1 Grade 6 **Catalog No. Prex 13.8:Ed 8/8**	**Price**	**$1.25**
4.	New York State Education Department Grades 4, 5, 6 **Catalog No. Prex 13.8:Ed 8/3**	**Price**	**65¢**
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8.	Tacoma Public Schools Grades 6–12 **Catalog No. Prex 13.8:Ed 8/6**	**Price**	**60¢**
9.	Resource Book for Drug Abuse Education **Catalog No. Fs 2.22:D 84/12**	**Price**	**$1.25**

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One of a Series

An Interagency Federal Committee was convened in the winter of 1969 under the auspices of the White House to make available to the Nation's schools a variety of State and local curricula for drug education and the prevention of drug abuse. Participating in the Committee chaired by the Office of Education, DHEW, were the Bureau of Narcotics and Dangerous Drugs, Department of Justice; the National Institute of Mental Health, DHEW; and the Office of Economic Opportunity.

As an initial step, the Committee established an Interdisciplinary Panel of non-Government professionals to review some of the drug abuse curricula developed by State and local school systems. Time did not permit a review of all curricula in use throughout the country.

The curricula selected are not recommended for adoption, but are distributed only as resources to assist schools in initiating or improving programs. All schools are encouraged to submit curricula and materials to the National Clearinghouse for Drug Abuse Information. These will be reviewed by the Panel and those selected will be made available to other school systems upon request. Your cooperation will be appreciated.

Selected curricula have been reprinted with the permission of the originating school systems. Single courtesy copies are available from the National Clearinghouse for Drug Abuse Information. An order blank to the Superintendent of Documents, GPO appears on the back of this publication if additional copies are desired.

The National Clearinghouse for Drug Abuse Information, operated by the National Institute of Mental Health, is the focal point for Federal information on drug abuse. The Clearinghouse provides information on request through publications, and a computerized information service. The Clearinghouse distributes publications and refers specialized and technical inquiries to Federal, State, local, and private information resources. Inquiries should be directed to the National Clearinghouse for Drug Abuse Information, Educational Services, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

INTRODUCTION

The problem of drug abuse is not a new phenomenon. Man's use and abuse of drugs dates back thousands of years. In recent years, however, the dimensions of the problem have reached frightening proportions, raising the specter of societal suicide. Contributors to our current concerns have been the easy accessibility of a myriad of drugs, a tense, stressful social environment, thrill seeking and escapism, among others.

In addressing itself to so complex a problem the discipline of education must go beyond mere dispensing of information and make a stronger effort to effect student attitudinal and behavioral change. The more traditional teaching methods will be inadequate to do the task. This implies the need for broadscale teacher training and retraining in new approaches and techniques. Periodic reinforcement will be needed if the operational style of the classroom is to change. What is required is a long-range view that will aim at the preparation of health educators and other school personnel who can address themselves to this and other serious health problems.

There must also be cooperation and involvement of all other segments of the community in a joint effort with the school if the mounting trend of drug abuse is to be reversed. The closeness of the effort needed is a condition that both the school and the community organizations will find unfamiliar, but melding of community effort is essential if the common objectives are to be met.

The tasks described above will require significant, long-term financial support and commitment. They will also require wise, perceptive leadership from national and state levels. An effective program of broad-based education should produce significant results by the end of the decade.

Interdisciplinary Panel

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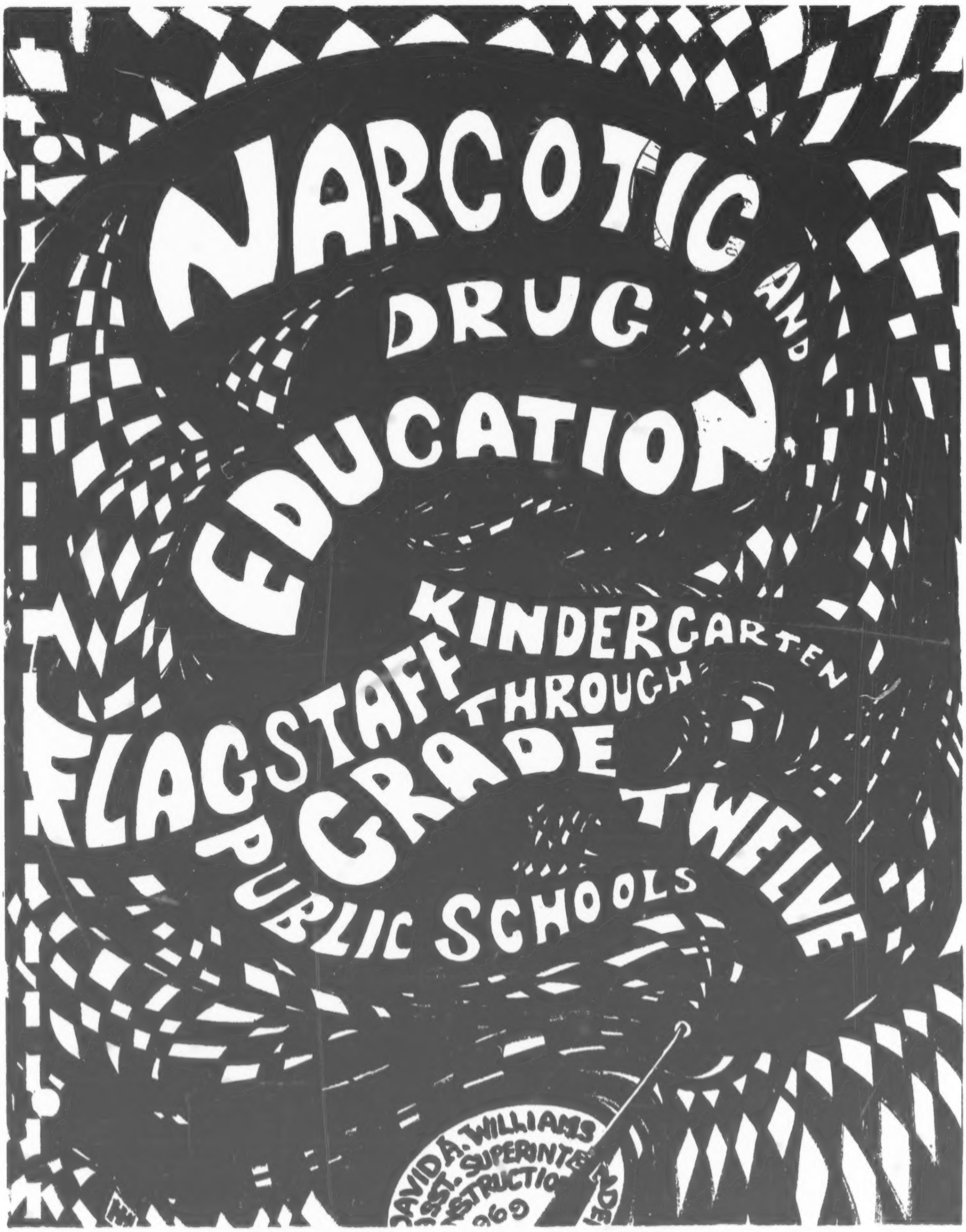
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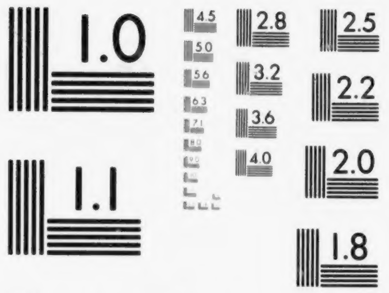

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INTRODUCTION

In April of 1969, the Flagstaff School Board authorized the formation of a committee on drug abuse education. The primary purpose of this committee was to bring together representation from all the agencies in Flagstaff working in the area of drug abuse to develop (1) an acceptable program for use in the public schools on the subject of dangerous drugs and narcotics abuse and (2) an information and assistance program for adults and parents in the community.

The first part of the Committee's work is found in the following pages. The second part of the Committee's assignment will be undertaken as the Committee becomes the Advisory Committee on Drug Abuse and Alcohol Education to the Coconino County Health Department.

The Committee wishes to acknowledge the Clark County School System, Nevada, for the materials used from their guide relating to behavioral objectives and methodology.

COMMITTEE MEMBERS

Berger, Leon H.	Coconino County Health Department
Burnett, Nancy	Reserve Officer, Flagstaff Police Department
Clark, Don C.	Assistant Superintendent, Flagstaff Public Schools
David, Jim R.	Teacher, Flagstaff Public Schools
DeMiguel, Manuel	Elementary Principal, Flagstaff Public Schools
Denlinger, William H.	Pastor, Trinity Heights Methodist Church
Duley, Norman D., M. D.	Psychiatrist
Dyer, Jack L., Ph. D.	Professor, Northern Arizona University
Flournoy, J. Michael	County Attorney, Coconino County
Goitia, David	Teacher, Flagstaff Public Schools
Hensley, Janet	Supervisor, Flagstaff Public Schools
Jewell, Lloyd	Investigator, Coconino County Sherriff's Office
Kirkham, A. J.	Juvenile Officer, Coconino County
Lehmberg, David	Pastor, Federated Church
Misslin, William	Editor, Arizona Daily Sun
Moore, Rachel, R. N.	Supervisor, Flagstaff Public Schools
Peterson, Ronald, Ph. D.	Director, Northern Arizona Comprehensive Guidance Clinic
Schreiber, Paul	High School Principal, Flagstaff Public Schools
Smith, Roy	Supervisor, Flagstaff Public Schools
Stamper, Bert	Officer, Flagstaff Police Department
Thomas, William, M. D.	Director, Coconino County Health Department

Williams, Bill	Junior High School Principal, Flagstaff Public Schools
Williams, David	Assistant Superintendent, Flagstaff Public Schools
Yeast, Paul	Public Relations Officer, Flagstaff Police Department

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IN-SERVICE TRAINING PROGRAM

DRUG ABUSE EDUCATION

The committee on Drug Abuse Education submits the following recommendations for an in-service training program to better prepare teachers to instruct students in the area of drug abuse.

Recommendations:

1. An in-service training program should be designed and implemented for teachers involved in the area of drug abuse education at the junior and senior high school level.
2. The Flagstaff School Board should grant one unit of credit toward the required training condition and advancement on its salary schedule.
3. The in-service training program should consist of fifteen hours of study.
4. The program suggested is as follows:

Thursday evening 7 - 10 p.m.

Session 1 - Subject: Pharmacology, Experiments and Myths of narcotics and drugs with emphasis on Marijuana.
Dr. Lincoln Clark

Session 2 - Question and answer period with Dr. Clark.

Session 3 - Discussion Groups: Reaction to the presentation and application to classroom instruction.

Monday evening 7 - 1- p.m.

Session 1 - Subject: Legal aspects of narcotic and drug abuse in Flagstaff. Panel representing police, judges and lawyers.

Session 2 - Question and answer period with the panel.

Session 3 - Discussion Groups: Reaction to the presentation and application to classroom instruction.

Tuesday evening 7 - 10 p.m.

Session 1 - Part 1 Subject: A User Speaks

Part 2 Subject: Sociological and psychological aspects and services available in Flagstaff.

Session 2 - Question and answer period following each part of session one.

Session 3 - Discussion Groups: Reaction to the presentations and application to classroom instruction.

Wednesday evening 7 - 10 p.m.

Session 1 - Subject: Practical situations in the classroom - Role Playing - Responder to each situation played.

Session 2 - Question and answer period with the responder.

Session 3 - Discussion Groups: Reaction to the presentation and application to classroom instruction.

Thursday evening 7 - 10 p.m.

Session 1 - Part 1 Subject: What students expect from a program in narcotic and drug abuse education - Panel of high school students.

Part 2 Subject: Discussion of Drug Abuse Education Guide.

Session 2 - Question and answer period following each part of session one.

Session 3 - Discussion Groups: Reaction to the presentation and application to classroom instruction.

The cost of this in-service program would be minimal.

The Coconino County Health Department would pay all cost for Dr. Lincoln Clark.

5. Representatives from other school districts in Coconino County would be invited to participate in the in-service program.

The Committee on Drug Abuse Education submits the following recommendations for adult education to be sponsored by the Coconino County Health Department.

Recommendations:

1. A public presentation by Dr. Lincoln Clark the evening following Dr. Clark's presentation for in-service training for teachers.
2. A public presentation on the legal aspects of narcotics and drug abuse presented by a panel representing the police, judiciary and lawyers.

3. A public presentation on the psychological aspects on narcotic and drug abuse and available services in Flagstaff.

GUIDELINES FOR SELECTING RESOURCE PERSONS
FOR THE DRUG ABUSE EDUCATION PROGRAM
IN THE PUBLIC SCHOOLS

The Committee on Drug Abuse Education recommends that the public school drug education program be based on a philosophy of presenting scientific knowledge and straightforward information. In an area beclouded with emotionalism and misinformation, the school approach will be to present the most accurate information available and to be honest in discussing areas of uncertainty where scientific knowledge is incomplete.

In accordance with these guidelines the Committee will seek assistance from agencies including the law enforcement agencies, medical association, county health department and the ministerial association. Such resource persons within or outside our community can provide valuable talent, information, and material to supplement the school resources and enrich the total educational effort.

The Committee asks that each cooperating agency select as its representative (s) for participation in the school program a person who:

1. will represent the official position of that agency;
2. possesses the experience, training and expertise to speak authoritatively concerning the agency's scope of operation;
3. is as completely informed as possible in matters of narcotic and drug abuse in his own area of concern;
4. will be able and willing to participate in group discussion with teachers and/or school age children, and to substantiate his statements with factual material;
5. will be consistant with the philosophy of the public school drug abuse education program.

DEVELOPMENT OF CURRICULUM CONTENT

LEVELS	DRUGS	PEOPLE			SOCIETY	
		Goals	Health	Behavior	Mass-Media	Law Enforcement
K-3	Orientation to food and non-food substances.	Early personality patterns.	Habits	Decision-making in the family context.	Advertising	Patriotism. Respect of law.
4-6	Explore beneficial uses of drugs. Brief understanding of amphetamines, barbiturates, and volatile chemicals.	Basic understandings and growing up.	Appreciation of body. General understanding of nervous system and brain and how they are affected by drugs.	Decision-making in the teacher pupil context.	Sophisticated evaluation of all advertisement and propaganda aspects.	Brief understanding of laws controlling the use of drugs and medicines.
7-9	Factual presentation of amphetamines, barbiturates, marijuana and other dangerous substances.	Self-control and the ability to communicate with others.	Attitudes. Psychological and physiological reactions to drugs.	Decision-making in the peer context.	Advertising as it relates to promoting a drug oriented society.	In-Depth study of laws and penalties related to drug abuse including district policy.
10-12	Academic approach to all narcotics, dangerous drugs and substances.	Application of self and making future plans.	Understanding of the application of positive human relationships. Responsibility.	Decision-making in the context of choices for the future.	Sophisticated evaluation of drug advertisements.	Academic study of laws and penalties related to the control of narcotics dangerous drugs and substances.

Grades Kgn. - 3

BEHAVIORAL OBJECTIVES

Knowledge:

1. The learner should be able to distinguish the difference between food and non-food substances, by naming several examples of each.
2. The learner should be able to demonstrate his knowledge of good personal habits and how they contribute to his health, by naming several examples.
3. The learner should be able to name several types of people in the community who work to preserve and better his health.
4. The learner should be able to demonstrate an understanding of non-food substances that are healthful when they are properly used by giving several examples.
5. The learner should be able to list several dangers of non-food substances and how to properly store them.

Attitudes:

1. The learner should be able to list several important reasons for protecting his health.
2. The learner should be able to demonstrate personal responsibility for protecting his health, by practicing sound health habits in the classroom.
3. The learner should be able to demonstrate his ability to help others by giving proper advice when confronted by a permitting situation.

Behavior:

1. The learner will not take medicine or unknown substances into his body unless directed by a parent or doctor.
2. The learner will report immediately to parent, teacher or other responsible adult any feelings of illness after taking any food or non-food substances.
3. The learner will not accept favors from strangers.

COMPONENT IDEAS	SUGGESTED METHODOLOGY
Good health is important	Allow students to draw pictures of healthy people engaged in some recreational or work activity. Have students explain, from a health view, why those in their picture can engage in the activities portrayed. Stress the importance of good food, sunshine, rest, exercise and fresh air.
The goal of healthy living is dependent upon the early development of good personal health habits.	Ask students to bring pictures, portraying examples, to class for display. Discuss how each habit will benefit the class members. Use the school nurse as a resource person to discuss the importance of good health habits.
The family works together to establish, protect and maintain good health.	Involve students in listing the duties of each family member which contribute to the family's good health. Role-play the duties of family members which help to maintain good health, e.g. cooking, brushing teeth, etc.
Community helpers e.g. doctors, nurses, policemen,pharmacists, garbage collectors and food inspectors.	List profession and occupations of those in the community who work to help us maintain and better our health. Use community helpers as resource persons to discuss their work related to health. Plan a field trip to a nearby pharmacy.

Medicine, when properly used, helps maintain good health.	Discuss reasons for taking medicines. Have students prepare oral reports on how medicine helped them fight an illness. List medicines which children are familiar with and discuss their effect on the body.
Advertising is used to persuade us to buy a product.	List familiar commercials on television pertaining to medicines and evaluate these. Collect drug advertisements and discuss how they are used to sell their product.
Non-food substances may be harmful to the body.	List non-food items that may be found in the home. Point out the dangers of over dose, taking the wrong medicine, how non-food substances can be harmful to the body, and what to do if one has such an accident. The teacher may want to show samples of potentially harmful substances common in the home.
Non-food substances should be properly stored.	List non-food substances that are potentially dangerous. Discuss proper places to store dangerous non-food substances and why they should be kept out of the reach of small children. Develop a list of symbols and words found on labels showing the contents are poisonous and dangerous. Relate an art activity as reinforcement.

Surplus and old, outdated medicines should be properly disposed of.	Discuss the dangers of keeping old medicines. Discuss the methods of properly disposing of old medicines.
It may be dangerous to accept any treat, such as candy or favor, from a stranger.	Discuss the dangers of talking to strangers or accepting anything from them. Role-playing what should be done if confronted by a stranger.
Laws are made to protect us.	List laws familiar to children and discuss why good citizens obey these laws. Discuss reasons why we need laws related to food and non-food substances.

Grades 4 - 6

BEHAVIORAL OBJECTIVES

Knowledge:

1. The learner should be able to list those substances which have harmful effects when used inappropriately.
2. The learner should be able to identify those situations in which temptations for experimenting with drugs might arise.
3. The learner should be able to identify drugs which have beneficial effects when used under the guidance of a medical doctor and yet may be dangerous when self-prescribed.
4. The learner should be able to identify advertising claims for dependency-producing substances which are misleading in nature.

Attitudes:

1. The learner should be able to identify ways one can live effectively and enjoyably without using various dependence-producing substances.
2. The learner should be able to identify how the body reacts to chemical solvents and other substances in ways that are harmful to the development and maintenance of good health.
3. The learner should be able to list ways by which society attempts to regulate the use of some products through legal and other channels.
4. The learner should be able to identify ways by which advertisers may encourage a person to use their product without describing the risks involved.

Behavior:

1. The learner should not use dependency producing substances without parent supervision.
2. The learner should use drugs only for medicinal purposes and always on the advice of a physician.
3. The learner should assume responsibility for his own well-being and avoid experimentation with dependency producing substances.
4. The learner should analyze, with an objectivity comparable to his maturity, persuasive appeals.

COMPONENT IDEAS	SUGGESTED METHODOLOGY
There is a lack of agreement on the age at which concrete data on drugs can be effectively taught.	Administer a pre-test to determine the current attitude towards, and the knowledge of drugs possessed by students. This may be a simple pencil-and-paper test or the information may be obtained and assessed through classroom discussion. Assess the accumulated information and determine the course of action most appropriate. It may be necessary that time be spent reviewing and enlarging the concepts and activities discussed in the previous section.
Good health and good health habits are the most significant goals an individual can have. Everyone must strive, individually and collectively, to maintain these precious possessions.	Initiate classroom activities which will help students to accept the concept of pride in and respect for their physical bodies. Expand the units already in teaching plans to encompass an awareness of the emotional and psychological adjustments to be faced in present experiences and in coming years. Involve students in activities which will result in an awareness of the fact that each of us needs a sense of belonging. Use every means to instill the idea that the human body is a miraculous creation and the appreciation of health is a precious resource.

Good mental health is dependent upon the adjustment we make in life and not upon external substances taken into the body.

Initiate classroom activities which will lead to an awareness that the joy of living comes from within.
Topics might include:
What do you do for fun?
What do you do for "kicks"?
With whom do you enjoy playing?
My most satisfying experience this past year was. . . . .

Some people attempt to find enjoyment, or to solve the problems of living, by consuming things which may be harmful to their health.

Motivate students to collect pictures, make scrapbooks, and prepare bulletin board display illustrating the enjoyable aspects of school life, family life, or community involvement.

Allow the development of committees which will develop reports on what is being done and what could be done in this area by schools, churches and the community.

Through class discussion compile a list of suggested problems the students consider important. Use this listing as a basis for planning further learning experiences.

Arrange learning experiences which will result in students compiling a list of things people eat or otherwise consume in order to feel better e.g. coffee, aspirin, shots from a doctor.

Analyze whether the feelings of well-being are social, physical, mental or a combination of these. Construct a chart or use other techniques to organize the information.

Man's search for ways to relieve pain and suffering has led to the discovery and development of many chemical combinations known as drugs.

Through class discussion, compile a list of ways in which students define drugs. Discuss their definitions. Submit this definition, or one of your choosing, to the students for discussion. (A drug is any substance, other than food, which effects body structure or function.)

Through discussion and analysis, arrive at an acceptable definition of the word drugs which will be used consistently in future presentations and discussion.

In a small group discussion, have students compile a list of the drugs which they have seen advertised. Have the lists presented for discussion and call attention to the difference. Compile a master list which may be written on the chalkboard or posted on the bulletin board.

In small group discussion or through committee research, develop a chart of the chronological progression of drug development. Use the chart as a discussion tool. Display it.

Use the school nurse to lead a discussion or answer student questions.

We live in a society which is becoming increasingly drug-oriented.

If you use parental involvement in student learning activities, have students bring in a list of all drugs, including over-the-counter medicines, which are in the home. Prepare a master list and discuss the significance of those medical preparations in life.

Involve students in compiling a list of radio, television, newspaper, or magazine advertisements urging use of specific medical preparations. Discuss these - cautioning students to be aware of the misleading statements.

	Involve students in making a scrapbook or a display of pictures and ads they have brought to class. Structure classroom activities to involve students in a role-playing situation showing the beneficial results of taking one of the medical preparations. Permit student involvement in discussion. Encourage self-expression through artistic illustration of an imaginary new "magic potion" discovered to cure all ills. Have others write advertising copy. Discuss. Provide a question box for anonymous questions about drugs. Select questions for discussion at various times.
There is a pill or potion for every minor discomfort, stress, pain and minor ill available at our modern drug stores and advertised in our mass media.	Develop any spelling or vocabulary lists you may desire focusing on drugs. Some students may be familiar with the slang terms listed in any material used. Involve students in small group discussions - Truth In Advertising. Debate the topic: "Slogans, Fact or Fiction."
Every substance taken into the body by any means enters into the complex functioning of the body and affects its condition.	Re-emphasize through class discussion the importance of sound health and the responsibility of each individual for maintaining and safeguarding his health. Guide committees or small groups to develop a diagram of the bloodstream, showing how substances enter the body and how they are carried throughout the body.

More able students may attempt constructing a simple working model to exemplify the idea of the circulatory system.

Encourage committees or individuals to do research on the brain and the nervous system stressing their interrelatedness with other systems, and their importance to other functions of the body.

Discuss the results of projects and assignments.

Encourage a committee of students to prepare a list of questions for a class interview with the school nurse.

Public concern about the harmful effects of all dependency-producing substances is increasing as scientific data accumulates.

Encourage students to report on television programs they have seen which deal with this idea. Analyze and discuss.

Encourage students to develop a list of dependency-producing substances found in our society and discuss. (The most common one is caffine - found in coffee and soft drinks.) Handle tobacco and alcohol as dependency-producing substances. Use the school nurse or community resource person to speak on dependence- producing substances.

Glue-sniffing, or more accurately solvent sniffing, is a dangerous and grossly overrated method of obtaining a "kick".

Design a pretest to determine present awareness of and knowledge about solvent sniffing and its consequences. Use the results to determine teaching procedure.

In small groups, allow students to compile a list of things people sniff. Discuss the presentation of the lists and compile a master list from all suggestions.

Involve students in activities which will lead to the preparation of a master list of all solvents which are found in a home. Divide them into "Harmful" and "Non-Harmful". Discuss the material.

Discuss the combining of solvents or chemicals found around home which produce a harmful combination.

Have some students, or a committee of all students, write an imaginary story involving a character who inhales solvents. Read and discuss in a group setting.

Make and use transparencies or overlays from *Goofballs and Pep Pills*, by Curtis.

No person should ever inhale the fumes of a volatile chemical if it can be avoided.

Have students discuss why.

There are dangerous poisonous plants growing in our community which can be harmful to individuals.

Through group discussion, or other techniques, have students compile a list of the known poisonous plants growing in that vicinity. Discuss the list.

If there are Boy Scouts in the class, have them consult with their leaders to see if additional information is available. Have them report to the class.

Encourage research to be conducted by individuals or committees and reports be made to the class for discussion.

Motivate the students to role-play their reaction and the procedures they would follow if poisonous berries or other plants were ingested. Discuss these with the class pointing out the dangers self-medication and the need to obtain professional help as soon as possible.

Initiate artistic activities which will lead to consulting the color plate. "Poisonous Plants," found in some dictionaries or encyclopedias.

Arrange displays of student materials.

The most common method of classifying drugs is by their effect on the central nervous system, especially the brain. The three effects are stimulants, depressants and hallucinogens.

Plan a problem-solving approach to the topic "Drugs and Their Proper Use" in which all students will be involved.

Arrange learning experience in which some students will research the history of drugs. Cover such aspects as early search to find substances to relieve ills, natural sources of drugs, and development of synthetic drugs, special drugs and their importance to man, and the growth of the drug industry in recent years.

Involve students in studying the organization of advertising for the drug industry. Tape recordings of advertisements could be prepared from mass media and played in the classroom. Collections of drug slogans might be made and discussed.

Encourage students to discover why some drugs are sold across-the-counter and others are available only by prescription. Discuss the safety precautions involved.

The drugs known as depressants reduce activity, produce drowsiness and cause mental dullness.

Familiarize the students, through discussion with the meaning of a depressant and its implications.

In a class discussion, encourage students to compile a list of depressant drugs with which they are familiar. Keep a copy of the list or write it on the chalkboard and add to it in later sessions.

	Combine the activities listed under "stimulants" with "depressants" when using a doctor, a pharmacist or other resource persons. Initiate classroom student panels to discuss the use of depressants to relieve pain, for sedation, epilepsy, high blood pressure, cough control and diarrhea. Research reports may be done by individuals or committees on the use of depressants or barbiturates. Discuss the reports and urge students to share appropriate materials with other grades. Initiate classroom activities which might involve a role-play situation on which a student is approached to try depressants. Discuss how he should react. Lead class into discussing why he should also report this to his parents, teacher or law enforcement person.
The drugs known as hallucinogens produce dream-like states or hallucinations.	A pre-test on hallucinogens might reveal an awareness of the drugs. Plan discussion, research, role-playing, and other activities if you feel there is a need in your group.
One attempt to deal with the dependency-producing drugs has been the enactment of more restrictive legislation and stricter enforcement of all related laws.	Individuals or committees can research the history of legislation relating to the use of dependency-producing drugs. Share these and discuss them. Initiate student panels on the effectiveness of legislative controls. Can laws be consistently enforced? What are some of the enforcement problems? Use resource person to discuss problems of enforcement with the students.

Role-play some of the enforcement problems. A student would enjoy being an undercover agent.

Encourage a committee to research the part that the World Health Organization of the United Nations plays in drug control. Share and discuss the report in the classroom.

Discuss with the students the meaning of the two words "emotional and dependence".

Initiate student panel discussions on "Things On Which We Are Dependent". Make a differential between helpful and harmful dependence.

Committees or individuals could collect advertisements for preparations which claim to be beneficial aids to the users. Discuss these, collect them in a scrapbook and make displays. Individual or committee research car be initiated which trace the history of man's dependence on non-food substances.

The ability to refuse the opportunity to experiment with the use or misuse of tobacco, alcohol or dangerous drugs is a learned behavior.

Role-play situations in which effective techniques of saying "NO" to introduction to the use of dependency-producing substances are exhibited.

Initiate student panel discussions in which techniques of saying "NO" are explored. Role-playing the consequences of not being able to say "NO" or the consequences of saying "NO".

Rather than using dependency-producing substances to solve the problems of life or to find excitement and thrills, a person should strive to achieve emotional maturity, including how to get along well with others.

Encourage students to write essays on the "Fine Art of Saying "NO". Discuss these .

Discuss the difficult process of growing up. Pre-adolescence is not an easy period in life and students need all the assistance they can find.

Through class discussion, list some of the steps relative to the experiences of your students which are necessary for emotional maturity.

Initiate discussions which relate to examples of mature and immature behavior.

Encourage the writing of essays on emotional maturity and related subjects.

Encourage discussion of student-oriented goals which are within the realm of student achievement.

Grades 7 - 9

BEHAVIORAL OBJECTIVES

Knowledge:

1. The learner should be able to list several effects that narcotics and dangerous drugs have on the body.
2. The learner should be able to clarify narcotics and dangerous drugs as to their effect on the body and to identification.

Attitudes:

1. The learner should be able to describe how a harmful substance can upset the finely balanced organism of the human body and cause permanent damage.
2. The learner should be able to identify several means of belonging or meeting certain emotional needs that do not involve the abuse of drugs.
3. The learner should be able to list the advantages afforded him if drugs and dangerous substances are not abused.
4. The learner should be able to list ways by which media is sometimes used to encourage people to try various products, yet no risks involved are described.

Behavior:

1. The learner should not experiment with narcotics and dangerous drugs and assume responsibility for his own well-being.
2. The learner should evidence a willingness to assist others in avoiding drug abuse.
3. The learner should abide by the laws which prohibit drug abuse.

COMPONENT IDEAS	SUGGESTED METHODOLOGY
A basic need of most adolescents is peer group acceptance.	Have students explain why they associate with the people they do. What is expected of people in their peer group.
	Have a psychologist or counselor speak to the group or setting individual goals and guidelines.
	Hold small group or large group discussions on the degree to which peer group acceptance depends upon membership in "cliques" or a particular group.
	Have students discuss the desirable and undesirable factors of a clique. To what degree do parents belong to cliques? Discuss how the concept of a clique relates to the total society.
	Have students role-play a situation where-by one student tries to gain acceptance into a clique on campus.
One way peer group acceptance is realized is through experimentation.	Discuss student ideas of types of experimentation to obtain peer acceptance. Stress manners of dress, appearances, speech and attitudes as it relates to peer group acceptance.
	Have students suggest reasons or factors involved in beginning to use drugs. Talk about the influence that family and religion have on the practice of drug abuse.
	Have groups tell where they are most likely to first come in contact with drugs. Emphasize that they will probably come from a friend.
	Role-play the situation of a student's first introduction to try drugs by a friend. Discuss how some people may be led to experiment with drugs.

Some junior high students are experimenting with marijuana to gain peer group acceptance.

Administer a pre-test covering information on marijuana.

Have students list reasons for experimenting with marijuana and evaluate each. Have students list the dangers involved in experimenting with marijuana and weigh this against results of pre-test.

Have students prepare a list of techniques on how to say "no" when offered marijuana. Mimeograph and distribute copies to students.

Conduct a debate on whether it is easier to say "yes or no".

Hold a small group discussion on how to say "no" and role-play.

Marijuana is derived from a plant which is grown in many parts of the world.

Form small research committees and give each committee responsibility for reporting on topics such as the following:

A. How is marijuana grown and marketed?

B. For what purpose is marijuana used and in what country or countries is it used the most?

C. To what extent is marijuana used in the United States as determined by the number of arrests in connection with it?

Display two pictures

1. Plant from which it is derived.
2. Typical marijuana cigarette.

Set up a question box and encourage the pupil to put into this box any questions they would like to have answered regarding the abuse of marijuana or other drugs.

Have selected students report on the amount and source of drugs smuggled into the United States.

Have students investigate various views regarding the use of marijuana (e.g. medical, religious and legal) and report to the class.

In the United States marijuana is ordinarily used in cigarette form.

Invite a resource person to explain and demonstrate the odor of marijuana by burning it.

Discuss with students the availability of marijuana in their county.

Discuss the ways marijuana is processed and used.

Marijuana has been recognized for its intoxicating properties since 200 A.D.

Have several students trace the use of marijuana by various countries of the world.

Discuss the various ways marijuana is taken into the body.

Develop and discuss a vocabulary list on marijuana.

Have students discuss and identify the intoxicating properties of marijuana.

Role-play the various eras of marijuana through history.

There is much confusion between authorities on the psychological, pertaining to the physical body, dependence of marijuana.

Have students discuss the difference between psychological and physiological dependency.

Have students explain why marijuana is said to be a habit forming drug.

Emphasize the fact that while marijuana is not addicting in the sense that tolerance and dependence accompany its use, its danger lies in the fact that it:

1. Releases inhibitions
2. Increases suggestibility
3. Impairs judgment
4. Can be a stepping stone to the more serious narcotic

Have students debate on whether marijuana is a dependency-producing drug.

Have students research and report in current research being done on marijuana.

The results of the use of marijuana are basically psychological and sociological.

Have a discussion why students want to get"high".

Have students report on how marijuana is smoked. Emphasize the point that it is usually smoked in a group and the related social decay involved.

Discuss reasons why society feels drug misuse cannot be tolerated.

Discuss ways to achieve emotional maturity and how to solve problems in a reasoned, scientific manner rather than seek escape via marijuana.

Compare the immediate effects of marijuana with the effect after a few hours.

Compare also the effect of taking marijuana alone.

The use of marijuana has many legal implications.

Have students report on the Marijuana Act of 1937.

Emphasize the fact that possession of marijuana is illegal regardless of use or intended use .

Have class discussion on what rights a citizen loses with a felony conviction.

Have students write a short story of what could happen to them if they were innocently with someone who was in possession of marijuana. Include marijuana tax and felony conviction and social implications in discussion.

Have resource person visit class to show students samples of marijuana and explain to them what could happen if they were caught with marijuana in their possession.

Role-play the situation of being caught with marijuana in your possession.

Some junior high students are experimenting with amphetamines and barbiturates to gain peer group acceptance.

Have students discuss why psychologists consider the use of dangerous drugs and substances as an escape mechanism.

Allow and encourage students to honestly express themselves. Suggested techniques:

1. Let student lead the discussions
2. Arrange discussion groups in a circular configuration with the teacher sitting in as a member of the group

Administer a pre-test covering information on amphetamines and barbiturates.

Have students list reasons for experimenting with amphetamines and barbiturates and evaluate each. Have students list dangers involved in experimenting with these drugs and weigh this against pre-test results.

Have students prepare list of ways to say "no" when offered amphetamines and barbiturates. Mimeograph and distribute copies to students.

Conduct a debate on whether it is easier to say yes or no.

Have selected students report on the amount and source of drugs smuggled into the United States.

Properly used, many drugs are of great value to mankind. Improperly used, they can damage the individual and interfere with his success in life.

Assign students to research and report on the proper medical used of barbiturates and amphetamines.

Have students develop a chart of dangerous drugs.

Have student debate the positive versus adverse use of drugs.

Role-play how taking a drug could make one dependent on it.

Have a resource person speak on the proper and improper use of drugs.

Amphetamines and barbiturates are synthetic chemicals that are marketed legally only on prescription.

Have selected students report on the amount and sources of drugs smuggled into the United States. Discuss the availability of these in the county.

Display various labeled pictures of barbiturates and stimulants.

Discuss reasons why society feels drug abuse cannot be tolerated.

Emphasize that drugs must be kept in the prescription bottle. Having a few pills legally prescribed not in the prescription bottle is illegal.

Have a resource person visit the class and explain the various laws regulation the distribution of prescription drugs.

Role-play showing why prescriptions are required.

Evaluate and discuss the various drug advertisements on television and elsewhere.

Discuss how our society is drug oriented.

Discuss the various slang names for amphetamines and barbiturates.

There are many social dangers associated with abuse of dangerous drugs.

Emphasize positive human endeavors:
1. Good habits
2. Responsibility to self, other and society
3. Raising a family
4. Earning a living

Discuss basic human needs:

Have students discuss why knowledgable individuals who are informed, turn to the use of drugs and other harmful substances.

Have students write an essay on why people use dangerous drugs and substances in spite of risks involved.

Discuss the importance of acquiring positive values and behavior patterns in early life.

Discuss with the class the steps whereby an individual may progress from a seemingly harmless experimentation with a drug to the serious drug dependence on a narcotic such as heroin.

Have students discuss how they would respond to these as arguments:
1. It's my life and I can do with it what I please.

2. My responsibility is to myself and to no one else.

3. If you experiment with drugs, that's your problem, not mine.

The ability to refuse the opportunity to experiment with or misuse dangerous drugs.

Set up a question box and encourage the pupils to put into this box any questions they would like to have answered regarding the use of dangerous drugs.

Have students list as many ways to say "NO" as they can. Ditto and give each student a copy of this.

Have students discuss ways to achieve emotional maturity and how to solve problems in a reasoned scientific manner rather than seek escape via the use of dangerous drugs.

Have students list reasons for experimenting with dangerous drugs and evaluate each. Have students list dangers involved in experimenting with dangerous drugs and weigh this against reasons for experimenting.

Role-play saying "NO" when offered a marijuana cigarette.

Have a student role-play a parent talking to his child after learning he had been using dangerous drugs.

Have a resource person explain to a group what could happen if they were caught with dangerous drugs in their possession.

The production of dangerous drugs has reached astronomical proportions in the United States. Billions of barbiturate and amphetamine capsules and tablets are manufactured every year.

Discuss the ways dangerous drugs are used locally.

Discuss where the local supply comes from.

Develop vocabulary and spelling lists on dangerous drugs.

Have students debate the positive value of drugs vs. the abuse of drugs.

Discuss how our nation is becoming a drug-oriented society.

Introduce and discuss slang terms coined for amphetamines and barbiturates.

One attempt to deal with dependence-producing drugs has been the enactment of more restrictive legislation and stricter enforcement of all related laws.

Have a resource person explain the penalties and laws governing narcotics and dangerous drugs. Also discuss problems involved in making an arrest that will hold up in court.

Discuss the district's policy regarding narcotics and dangerous drugs in schools.

Have a resource person explain the recent changes in laws governing prescriptions and regulation of drugs.

Have students suggest new ways to better regulate the control of drugs and suggest penalties for various violators.

Have students or committees write letters to United States Border Patrol requesting information on narcotics and dangerous drug control.

Dangerous drugs, particularly barbiturates, are thought by many to be more dangerous than the narcotic drugs.

Have students compare barbiturate withdrawal with heroin withdrawal.

Have students report on difference between narcotic and non-narcotic drugs.

Emphasize medical and legal definitions.

Discuss the legal penalties of narcotics vs. dangerous drugs.

Have a resource person explain difference between dangerous narcotics and dangerous drugs and how both are distributed.

When student interest dictates, be prepared to discuss or debate the use of dangerous drugs vs. the use of narcotic drugs.

Barbiturates are central nervous system depressants.	Have several students trace the development of barbiturate type drugs. Have debate on whether bartiturates meet the medical definition of a narcotic or not. Debate whether barbiturates should legally be classified as a narcotic or not. Use pictures or charts of brain and the nervous system and explain how barbiturates effect these areas. Have students explain the dangers of driving under the influence of barbiturates.
Amphetamine is a central nervous system stimulant best known for its ability to combat fatigue and sleepiness. It is also known to control weight.	Discuss or role-play why drivers, students, athletes and adolescents abuse amphetamines. Discuss how amphetamines affect the body. Invite a resource person to speak on the psychological and physiological effects of amphetamines. Discuss or debate the psychological and physiological affects of amphetamines. Have a resource person explain what amphetamines are usually prescribed for. Discuss why and how amphetamines are abused. Discuss the control of amphetamines by prescription and other legal channels. Discuss and list social dangers of amphetamine abuse.
Amphetamine users do not develop total dependence, but they may develop psychological dependence upon the drug.	Have students trace the story of amphetamine type drugs.

Debate whether amphetamines meet the legal classification of a narcotic.

Discuss the medical definition of nartocics vs. the definition of amphetamines.

Discuss psychological dependence of amphetamines.

Have a resource person explain what psychological dependence is as compared to physiological dependence.

Have a resource person explain what amphetamines are legally used for.

Discuss how some women take a diet pill on Saturday morning to have the energy to clean the house.

DRUGS, NARCOTICS, AND SUBSTANCES

I. Definitions

1. **Drug:**

   Any substance used in medicine for the prevention, treatment, or cure of disease.

2. **Narcotics:**

   A drug which causes drowsiness, stupor, or unconsciousness.

II. Classifications of Drugs

1. Antibiotics (miracle drugs) used to treat infections.

   a. Penicillin
   b. Achromycin
   c. Declomycin
   d. Chloromycetin
   e. Aureomycin
   f. Streptomycin
   g. Sulfa

2. Stimulants - used to promote a temporary speeding-up of some life activity.

   a. Caffeine

      (1.) Coffee
      (2.) Tea
      (3.) Cocoa
      (4.) Cola

   b. Amphetamines

      (1.) Benzedrine
      (2.) Dexedrine
      (3.) Epinephrine
      (4.) Ephedrine
      (5.) Methedrine (Speed)

   c. Adrenalin

   d. Strychnine
   e. Cocaine
3. Depressants - used to produce a temporary slowing-down of some life activity, also used to dull the senses, promote sleep, or relieve pain.

- a. **Barbiturates**
  - (1.) **Phenobarbital (Luminal)**
  - (2.) **Nembutal**
  - (3.) **Amytol**
  - (4.) **Seconal**
  - (5.) **Allonal**
  - (6.) **Veronal**
- b. **Tranquilizers**
  - (1.) **Thorazine**
  - (2.) **Compazine**
  - (3.) **Equanil**
  - (4.) **Miltown**

4. **Narcotics:**
   - a. **Opium**
   - b. **Morphine**
   - c. **Codeine**
   - d. **Heroin**
   - e. **Paregoric**

5. **Hallucinogens - hallucinatory effect**
   - a. **L.S.D. (Lysergic Acid)**
   - b. **D.M.T. (Dimethyltryptamine)**
   - c. **Peyote**
   - d. **Hashish**
   - e. **Mescaline**
   - f. **Psilocybin**
   - g. **Psilocyn**
   - h. **Marijuana**
   - i. **S.T.P.**

6. **Solvents - substances commonly abused**
   - a. **Airplane glue**
   - b. **Gasoline**
   - c. **Paint thinner**
   - d. **Lighter fluid**

NARCOTICS

I. Sources of Narcotic Entry into the United States

A. Country of Orgin

1. **Bolivia - cocaine**
2. **Chile - cocaine**

3. China - heroin, opium
4. Ecuador - cocaine
5. France - heroin, morphine
6. India - opium
7. Italy - morphine
8. Korea - heroin
9. Lebanon - morphine, heroin
10. Malaysia - opium, morphine
11. Mexico - opium, heroin, marijuana
12. Syria - morphine
13. Thailand - opium, heroin
14. Turkey - morphine, heroin, opium

TERMINOLOGY AND SLANG EXPRESSIONS

1. Drug Dependent - a user who has developed an intense craving for a drug

2. Amphetamines - known to abusers as:

a. "hearts"
b. "peaches"
c. "roses"
d. "bennies"
e. "dexies"
f. "co-pilots"
g. "browns"
h. "footballs"
i. "greenies"
j. "oranges"
k. "speed"

Injectable amphetamines are known as:

a. "bombido"
b. "jugs"
c. "Bottles"

3. Barbiturates - known to abusers as:

a. "Barbs"
b. "candy"
c. "goofballs"
d. "sleeping pills"
e. "peanuts"

Amobarbital Sodium - known to abusers as:

a. "blues"
b. "blue birds"
c. "blue devils"
d. "blue heavens"

Amobarbital Sodium combined with Secobarbital - known to abusers as:

a. "rainbows"
b. "red and blues"
c. "double trouble"

Pentobarbital Sodium - known to abusers as:

  a. "yellows"
  b. "yellow jackets"
  c. "nimbies"

Secobarbital Sodium - known to abusers as:

  a. "reds"
  b. "Pinks"
  c. "redbirds"
  d. "red devils"
  e. "seggy"
  f. "seccy"

4. **"Caps"** - capsules of morphine or heroin

5. **"Decks"** - packets of morphine or heroin

6. **"Dope"** - term applied to narcotic drugs

7. **Drug** - any substance used in medicine for the prevention, treatment, or cure of a disease

8. **"Hooked"** - an addict who needs increasingly larger doses of a drug

9. **"Mainlining"** - injection into a vein

10. **Marijuana** - known to abusers as:

  a. "pot"
  b. "hashish"
  c. "weed"
  d. "indian hay"
  e. "loco weed"
  f. "texas tea"
  g. "rope"
  h. "reefer"
  i. "sticks"
  j. "grass"

11. **Narcotic** - drugs which cause drowsiness, stupor, or unconsciousness

STIMULANTS

I. **Effects on Body** - directly stimulates the central nervous system producing:

  1. Excitation
  2. Alertness
  3. Increased initiative and activity
  4. Ability to go without sleep for prolonged periods of time

II. **Medical Use**

  A. **Amphetamines** - prescribed for:

    1. Overweight patients (to reduce appetite)
    2. Narcolepsy - depressed state
    3. Parkinson's Disease
    4. Cases of minor mental depression

III. Abuse

A. Continued and Excessive Dosages Cause:

1. Excitability
2. Talkativeness
3. Tremor of the hands
4. Dilated pupils
5. Heavy perspiration
6. Delusions
7. Hallucinations

DEPRESSANTS

I. Effects on Body - depress the central nervous system

II. Medical Use

A. Barbiturates prescribed for:

1. Sleep (small dosages)
2. Acute anxiety
3. Hyperthyroidism
4. High Blood Pressure

III. Abuse

A. Continued and Excessive Dosages Cause:

1. Slurring speech
2. Staggering
3. Loss of balance and falling
4. Quick temper
5. Quarrelsome disposition
6. Overdoses, when taken in conjunction with alcohol result in unconsciousness and death

HALLUCINOGENS

I. Effects on Body - cause hallucinations; a mind-expanding drug

II. Medical Use

A. L.S.D. - No medical use as yet has been found after nearly 20 years of clinical research

B. Areas now under study:

1. Treatment of mental disorders
2. Alcoholism
3. Psychotic children and adults
4. Sex abnormalities

III. Abuse

A. Continued and Excessive Dosages Cause:

1. Increase in blood pressure
2. Increase in heart rate
3. Increase in blood sugar
4. Nausea
5. Chills
6. Flushes
7. Irregular breathing
8. Trembling
9. Excessive sweating of the hands

IV. A. Marijuana

B. Peyote

C. L.S.D.

D. D.M.T.

E. S.T.P.

F. Substance sniffing

CURRENT DRUG PROBLEMS

I. Number of Drug Dependents in the United States:

1. Serious problem

II. Types of People Affected:

1. All classes

   a. Poor
   b. Middle class
   c. Rich

III. Areas of Involvement:

1. All areas

   a. Small towns - ranch houses
   b. Large towns - mansions
   c. Cities - city tenements

IV. Drugs Being Abused:

1. Narcotics
2. Depressants

3. Stimulants
4. Hallucinogens
   All are dependence-inducing in one way or another (Physical or Psychological)

V. Age Groups Involved:

1. Teen-agers - largest group

   a. Formerly prevalent in slum areas
   b. Today, teenagers in all areas, even the more sophisticated, affluent, suburben areas are involved.

VI. Reasons for Involvement:

1. Slum bleakness
2. Poverty
3. Minority frustrations
4. Unsatisfied adolescent drives
5. Family disorganization
6. Personality factors
7. Social pressures
8. For "kicks" and feeling of joy
9. Dependency to ease pain of surgical operation or illness (small percent)
10. To escape reality - escape into a dream world where addict can ignore the problems and responsibilities of life
11. Emotional disorders
12. Character disorders
13. Surplus of spending money

VII. Tragic Results of Use of Narcotics and Dangerous Drugs:

1. Individual becomes emotionally unstable
2. Lacks maturity to face life's disappointments, frustrations, and conflicts
3. The addict becomes unable to earn an honest livelihood
4. The addict eventually becomes a tragic misfit and failure, haunted and hunted, an outcast from normal society
5. Crimes of stealing, forgery, prostitution, are on the increase in order to obtain money for drugs

VIII. Symptoms of Withdrawal from an Opiate Drug

1. Nervousness, restlessness, anxiety
2. Runny nose and eyes, yawning, sweating
3. Enlargement of eyes, gooseflesh, muscle twitching
4. Severe aches of the back, and legs; hot and cold flashes
5. Loss of weight, appetite, and sleeplessness
6. Extreme restlessness, vomiting and diarrhea
7. Increase in breathing rate, blood pressure, and temperature
8. A feeling of "desperation" and an obsession with securing a "fix"

LEGAL CONTROLS ON NARCOTICS

Harrison Act of 1914

Provides for the legal sale of narcotics through wholesalers to drugstores and to patients only on doctor's prescription.

The Marijuana Act of 1937

Makes it illegal to sell or possess marijuana.

State and Federal Laws

Grades 10 - 12

BEHAVIORAL OBJECTIVES

Knowledge:

1. The learner should be able to list ways in which the proper use of drugs can be beneficial to man.
2. The learner should be able to list the harmful physiological, psychological and sociological effects resulting from the misuse and abuse of drugs, narcotics and other harmful substances.
3. The learner should be able to recognize and discuss how these problems relate to the individual, the community, the family, industry and business, traffic safety, crime, health and disease.
4. The learner should be able to describe with reliable data, how the irresponsible use of these substances fails to contribute to health and happiness.
5. The learner should be able to describe, with information based on reliable data, the newest evidence about the influences of various narcotics, drugs and other harmful substances on physical and mental make-up of people.

Attitudes:

1. The learner's sense of responsibility for personal health and the well-being of others, related to practices involving drugs, will be supported by reliable data proving non-abuse.
2. The learner's awareness that good adjustment to social problems and the release of emotional tension can be met by rewarding and constructive ways will be demonstrated by his classroom behavior.
3. The learner's interest in seeking out activities associated with sports, recreation, hobbies, the fine arts, churches and clubs in the use of leisure time will be supported by positive, factual information.
4. The learner's interest in keeping up with the latest reliable information about drug abuse education will be enhanced.

Behavior:

1. The learner should be able to evaluate critically the appeals made by promoters of various dependency-producing substances and be able to resist the temptations resulting from incomplete information.
2. The learner should be able to support the efforts of society to control the use of dependency-producing substances.
3. The learner should be able to show respect and support of the law enforcement agencies of our society.

COMPONENT IDEAS	SUGGESTED METHODOLOGY
Many secondary school pupils already have considerable information and misinformation about drugs.	Administer a pre-test to determine the degree of factual sophistication already present in the classroom about drugs.
	Using this information, it may be advisable to survey the previous section of this guide and re-emphasize some of the material outlined there.
	Use whatever methodology and media you think appropriate from the previous sections of this guide.
	Involve the students in a "Meet the Press" role-playing situation in which one student authority is questioned by a committee of student reporters. Individualize the title to read "Face The Class" or "Face The Nation" but involve the participating students in expression of present information that is available to them.
	Encourage small group discussion on a topic related to "Me, Drugs and the Future" in which elements of how drug abuse can change self-concepts and goals.
	Enlist student participation in problem solving situations presented (e.g., appoint a father, a mother, and a daughter to role-play a discussion between parents and child about the use of drugs).
	Role-play a situation in which teacher appoints a religious leader and a student. The conversation centers around the student's explanation of how and why he participates in "pill popping."

LSD (lysergic acid diethylamide), an odorless, colorless and tasteless drug, is the most potent member of drugs which also includes dimethyltryptamine (DMT), peyote, mescaline and psilacybin. These have the power to bring about radical and often dangerous changes in human behavior.

Initiate classroom activities which will lead the students to collect articles from current news media indicating the scope of the LSD problem.

Use the articles collected for oral presentations for group discussion, to form a bound scrapbook collection for bulletin board display, or on basis for group reports.

Involve a small group of selected students in a project of exhibiting a collection of known ways in which LSD is used (e.g., candy, postage stamp, and on clothing).

Motivate learners with a desire to express themselves orally or to organize their factual material in written form to be shared with others in the class. Discuss the presentations.

Cite a case study of your choice and allow the students to discuss the degree of its validity and its implications.

Involve a group of students in role-playing on imaginary television report centered around the suspicion that the city water supply has been contaminated with LSD. This project could simulate reaction to such a situation.

Researchers have found, even in carefully controlled studies, that psychological response to LSD cannot be predicted and neither is there consistence in response within an individual.

Involve students in activities which result in a panel discussion of the physiological implications of the use of LSD.

Encourage research on the commonly held assumption that users of LSD are persons with inadequate personality adjustment. Discuss the oral or written reports resulting from this investigation.

Because LSD is relatively new, a complete and well-authenticated catalogue of dangers of use or abuse cannot be compiled.

Through class discussion or other teaching technique, compile a list of all possible "dangers" of the use of LSD. Keep the list, write it on the chalk board, post it, or use it for a springboard to continued involvement.

Encourage students to take one of the possible dangers and do a research report on their choice. Share the information in class.

Use the fact sheet information as a basis for discussion. Allow students to add categories they think are omitted.

Use the fact sheet information to involve students in activities of their choice which will underscore the particular dangers of adolescent use of LSD as a substitute for good personality adjustment and maturations.

In connection with personality adjustment, use your imagination to involve students in projects, reports, debates, and role-playing.

The Federal Drug Abuse Control Amendments of 1965 provide strict penalties for anyone who illegally produces, sells or disposes of dangerous drugs like LSD.

Involve students in research on the historical aspects of the development of drug abuse laws. Share reports in the classroom.

Use law enforcement officials as resource persons to discuss law enforcement and the special problems LSD presents. Allow student involvement in arrangements for their appearance, for introduction and for discussion.

Initiate activities in the classroom which will lead to oral or written reports (shared with the class) concerning the Drug Abuse Control Amendments of 1965. They may want to comment about their parents complaining about not being able to get a prescription renewed without the consent of the doctor. This stiuplation stems from these Amendments.

Limited research is being conducted to discover beneficial used of LSD. The National Instutute of Mental Health has fifty-eight (58) research projects authorized through the Center for Studies of Narcotic and Drug Abuse.

Involve students in a debate of the pros and cons of having LSD available for research by reliable agencies.

Encourage students to search out and report on research projects of their choice. Some investigation has been done on the possible use of LSD with mental patients. Discuss reports.

Manipulate classroom activities which might involve students in role-playing a research situation based on factual data.

Other hallucinogens equally tempting and dangerous to adolescent include: DMT, Psilocybin and psilocin, mescaline, and ibogaine.

If time permits, or you choose this material for your emphasis, select those sections of the methodology and media of the preceding pages which you consider appropriate to accomplish your objectives.

The term narcotic refers, generally, to opium and pain-killing drugs made from opium (e.g., heroin, morphine, methadon, paragoric and codeine).

Administer a pre-test to determine the degree of factual sophistication about narcotics already present in the classroom.

Using this information, it may be advisable to survey the 7-9 section of this guide and re-emphasize some of the concepts outlined there.

The abuse and possession without prescription of narcotics and dangerous drugs is against the law.

Use whatever methodology and media you think appropriate from previous sections of this guide.

Initiate a general discussion on narcotics and local use to determine the material in this section which should receive emphasis.

Opium is a dark brown or black tarry-gum, which is obtained from the dried milky juice of the unripe seed pod of the opium poppy. It has a faint odor and a bitter taste.

Involve the students in research projects related to the historical aspects of opium.

Encourage students to report on data collected about the physical reactions to opium usage and discuss.

Involve resource persons for a discussion of the legal controls on opium which have been instituted over the years.

Encourage students with a literary inclination to report on stories, books, and bigraphies which may have meaningful information on opium and its use. Stories with an oriental setting might be investigated for information.

The opium derivatives are morphine, an odorless, white crystalline substance; and cocaine. Heroin is synthesized from morphine.

Use those section of methodology from the previous page which seem significant to the accomplishment of your objectives.

Develop methodology which will be individually appropriate to the accomplishment of the educational goals in your classroom.

Discuss the court's regulation regarding drug abuse in school.

The heroin user jeopardizes his health and is in danger of dying from an overdose.

Encourage students to undertake research reports related to the historical aspects of heroin. These might include the history of the use of heroin and the history of legal efforts to control usage. Discuss the oral or written reports.

Organize, or development, of small groups or committees who will become involved in preparation of charts, graphs and pictorial reproductions of the history of the use of heroin.

Involve students in collecting data on the physiological reactions to heroin use and abuse. Discuss the data.

Cite a case study of drug dependence of the heroin type. Encourage students to discuss the reality and validity of the concepts presented.

Invite resource persons into the classroom to discuss local concerns in the areas of heroin use and abuse. Allow time for student discussion and become conscious of follow-up activities which might become apparent.

Encourage students with special interests or talents (e.g.,literary, artistic or scientific) to pursue projects or research which will involve optimum use of their talents in quest of knowledge about heroin and its use.

A heroin user can develop a total drug dependence and become enslaved by the drug Law enforcement officials attribute the need to secure money to pay for the habit as the reason for theft and prostitution among abusers.

Involve students in a debate on the facts and fiction of drug dependence of the heroin type. Much information is available in libraries.

Encourage small group discussion about the relationship between drug dependence of the heroin type and crime. Expect the student to furnish reliable data to support his statements.

Arrange learning experiences which might result in debate on the controversial steps which lead to drug dependence of the heroin type.

Use or possession of heroin in the United States is prohibited except for authorized research.

Involve students in research which traces opium from its raw form, in Turkey, to conversion to morphine and then to heroin in Italy and France, and transportation to the United States.

Encourage students to search out the national and international efforts to control the use of heroin.

Motivate your talented students in art projects to portray some aspect of this study. Use the pictures for display and illustration.

Allow small group discussion in which there is sharing of attitudes and opinions. Have each group make a group report to the entire class.

Use materials and techniques found in textbooks (e.g. health and biology) to promote student involvement.

Percodan (oxycodone), meperidine (demerol), and methadone (dolphine) are synthetic narcotics which have caused increasing concern because of their abuse.

Encourage a committee of students to read the article on methadone in the Yale Alumni Magazine, 1969, and prepare a report for the class.

Discuss the methods that rehabilitation and treatment centers are using with drug-dependent people.

Because of the societal and human costs of drug dependence, rehabilitation is a major concern of universal nature.

There are six (6) other major types of treatment programs. Using a technique of your own involve students in research and reporting on:
1. The California Program
2. Narcotics Anonymous
3. Synanon
4. Daytop Lodge
5. The British System

All national and international law enforcement agencies are working together to control and eliminate drug abuse. Each of us has a part to play.

Involve students in researching the background, the actual content of the laws, and their effectiveness.
The Harrison Narcotics Act of 1914
The Narcotic Drugs Import and Export Act, 1922
The Marijuana Tax Act of 1937
The Opium Poppy Control Act of 1942
The Narcotic Control Act of 1956
The Drug Abuse Control Amendments of 1965
and any acts of more recent origin.

Involve the students in researching the activities of the World Health Organization in international control of drug abuse. Encourage them to present panel discussions, oral reports, written reports, or any other vehicle can be employed to present the information.

Involve students in discovering how other nations handle their drug abuse problems. Biafra shoots the "pusher" (even of marijuana) on sight with no formality of arrest or trial. The user gets a trial and an automatic twenty years.

DRUGS AND NARCOTICS

A. Introduction

B. History of drug and narcotic use

C. Legislation and control of drugs and narcotics

  1. Acts of Contress

    a. Harrison Act
    b. Marijuana
    c. Narcotic Drug Import and Export Act
    d. Control of Synthetic Narcotics (Robertson Amendment)
    e. Narcotics Control Act of 1956
    f. Narcotics Mfg. Act of 1960
    g. Drug Abuse Control Amendment, 1965

  2. Arizona Laws

  3. International Relations

    a. United Nations
    b. World Health Organization

D. Causes of drug dependence

  1. Accidental - Becomes dependent during course of medical treatment
  2. Neurotic - drugs used to "escape"
  3. Psychopathic - takes drugs for "kicks"

E. Effects of dependence (General)

  1. Physical: Loss of appetite
     Feeling of well-being diminished
     Loss of vigor and vitality
     Loss of muscular coordination
     Insomnia

  2. Personality: Feeling of tension and anxiety
     Criminal tendencies to support high cost of dependence
     Loss of integrity
     Weakening of character traits
     Loss of tolerance to physical and psychic pain

  3. Mental Disorders

F. Prevention of dependence

  1. Develop worthwhile goals and standards
  2. Choose friends carefully

3. Use leisure time wisely
4. Know dangers of drug and narcotics use
5. Report illegal use and experimentation with drugs and narcotics

G. Identification of Drug Experimenters and Users

1. Responsibility
2. Procedures

H. Classification of drugs. Medical use, abuse and effects

1. Narcotics

    a. Definitions
    b. Emotional addiction
    c. Physical addiction; withdrawal syndrome
    d. Tolerance
    e. Opium and derivatives - Morphine (M, "monkey") Dilaudid, demerol, heroin (H, "Horse") Paregoric These drugs reduce sensitivity to physical and psychological stimuli thus relieve or modify any type of pain

    Source - Oriental poppy
    Medical Use - Medical and dental professions must make cautious diagnoses and prescribe carefully
    Pharmacists are legal guardians of drug supplies
    They fill three types of prescriptions: written, oral and exempt
    Results - Chronic use results in physical and psychological dependence
    The dosage must be increased to get the desired effect. Potential effect on unborn
    Withdrawal Syndrome - Nervousness, running eyes and nose, vomiting, diarrhea, feeling of depression, obsession with more drugs

2. Depressants: Phenobarbital, barbital, seconal, Tranquilizers, ("Goof Balls," "yellow jackets," "blue angels")

    Source - Barbituric Acid
    Medical Use - Valuable in anxiety states, Hyperthyroidism, diagnosis and treatment of mental conditions
    Abuse and effects - Tolerance and physical dependence develop with chronic excessive use. Slurring of speech, staggering, falling, quarreling, unconscieousness and coma
    Results - User becomes true drug dependent
    Withdrawal Syndrome - Disorientation, vomiting, convulsions, coma, death

3. **Hallucinogens:** Mescaline psilocybin, lysergic acid, diethylamide (LSD), Model airplane glue, solvents, STP, DMT, Peyote, Marijuana
   - Medical use - No legitimate medical use except on a research basis
   - Abuse and effects - Not true addictive agents. Produce out-of-the-body states that may be philosophical, religious, or mystical. Sounds are felt, colors tasted, objects pulsate and breathe while new colors are born in swirling, flowing geometric designs. Hallucinogens have now become a part of the pattern of drug abuse.
   - Marijuana - Hashish ("pot," "tea", "reefers," "sticks," "grass".)
   - Source - Indian hemp plant
   - Medical Use - has no therapeutic value
   - Abuse - Smoked or consumed by mouth as oil
   - Effects - Vary with individual. Exhileration, power, depression, drowsiness, sleep, anti-social behavior
   - Results - Mental and emotional dependence. May lead to stronger drugs. Questionable.

4. **Antidepressants and Stimulants:** Cocaine ("C" or "snow") coca plant, Amphetamines-chemical synthetics; Caffeine-coffee, tea, cola drinks, "No Doz Pills;" Benzedrine and dexedrine ("Bennies") Methedrine (Speed)
   - Medical Use - To reduce swelling in nasal passages
   - Abuse and effects - Used by drivers and students to stay awake. Prolonged use may cause nervous disorders.

I. **Drugs and Narcotics as a problem**

   1. **Medical**

      a. Physician may establish potentially dangerous therapy that leads to dependence

         (1) Sedatives or stimulants used for prolonged periods
         (2) Acceding to patient's request for more medication

      b. Accidental poisoning

   2. A Social Problem

      a. Crime and drug dependence

J. Treatment and rehabilitation of drug dependents

1. Physical

    a. Withdrawal of drug - Total ("cold turkey"); slowly; substitution therapy

2. Hospitalization

    a. Physical examination
    b. Rest and sleep
    c. Social and emotional rehabilitation
    d. Job or school program for return to society

3. Treatment centers

    a. U. S. Public Health Service Hospitals: Lexington, Kentucky; and Fort Worth, Texas.
    b. State, city and private hospitals

K. Drug and Narcotics Glossary

1. Jargon
2. Technical terms

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VISUAL AIDS

COUNTY HEALTH DEPARTMENT

TELL IT LIKE IT IS	Film Strip
ALIENATED GENERATION	Film Strip
L.S.D. - THE ACID WORLD	Film Strip
WHY NOT MARIJUANA	Pamphlet - Filmstrip
GLUE SNIFFING	Pamphlet - Filmstrip
LET'S TALK ABOUT GOOF BALLS AND PEP PILLS	Pamphlet - Filmstrip
L.S.D. - TRIP OR TRAP	Pamphlet - Filmstrip
DISPLAY KIT OF DANGEROUS DRUGS	
SPEAKERS SERVICE	

N.A.U. FILM LIBRARY

DRUG ADDICTION	16 mm Film
DRUGS AND THE NERVOUS SYSTEM	16 mm Film
LSD - INSIGHT OR INSANITY	16 mm Film
MARIJUANA	16 mm Film

FLAGSTAFF POLICE DEPARTMENT

MARIJUANA	16 mm Film
LSD - INSIGHT OR INSANITY	16 mm Film
DRUGS AND THE NERVOUS SYSTEM	16 mm Film
DRUG ABUSE - THE FALSE ILLUSION	Pamphlet

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613.8 Drugs: Hallucinogenic. School Health Ed. Study No. 4994 20 transparencies.

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Curriculum Guide for Drug Education - Grades 6 — 12
Tacoma Public Schools
Tacoma, Washington

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One of a Series

An Interagency Federal Committee was convened in the winter of 1969 under the auspices of the White House to make available to the Nation's schools a variety of State and local curricula for drug education and the prevention of drug abuse. Participating in the Committee chaired by the Office of Education, DHEW, were the Bureau of Narcotics and Dangerous Drugs, Department of Justice; the National Institute of Mental Health, DHEW; and the Office of Economic Opportunity.

As an initial step, the Committee established an Interdisciplinary Panel of non-Government professionals to review some of the drug abuse curricula developed by State and local school systems. Time did not permit a review of all curricula in use throughout the country.

The curricula selected are not recommended for adoption, but are distributed only as resources to assist schools in initiating or improving programs. All schools are encouraged to submit curricula and materials to the National Clearinghouse for Drug Abuse Information. These will be reviewed by the Panel and those selected will be made available to other school systems upon request. Your cooperation will be appreciated.

Selected curricula have been reprinted with the permission of the originating school systems. Single courtesy copies are available from the National Clearinghouse for Drug Abuse Information. An order blank to the Superintendent of Documents, GPO appears on the back of this publication if additional copies are desired.

The National Clearinghouse for Drug Abuse Information, operated by the National Institute of Mental Health, is the focal point for Federal information on drug abuse. The Clearinghouse provides information on request through publications, and a computerized information service. The Clearinghouse distributes publications and refers specialized and technical inquiries to Federal, State, local, and private information resources. Inquiries should be directed to the National Clearinghouse for Drug Abuse Information, Educational Services, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

INTRODUCTION

The problem of drug abuse is not a new phenomenon. Man's use and abuse of drugs dates back thousands of years. In recent years, however, the dimensions of the problem have reached frightening proportions, raising the specter of societal suicide. Contributors to our current concerns have been the easy accessibility of a myriad of drugs, a tense, stressful social environment, thrill seeking and escapism, among others.

In addressing itself to so complex a problem the discipline of education must go beyond mere dispensing of information and make a stronger effort to effect student attitudinal and behavioral change. The more traditional teaching methods will be inadequate to do the task. This implies the need for broadscale teacher training and retraining in new approaches and techniques. Periodic reinforcement will be needed if the operational style of the classroom is to change. What is required is a long-range view that will aim at the preparation of health educators and other school personnel who can address themselves to this and other serious health problems.

There must also be cooperation and involvement of all other segments of the community in a joint effort with the school if the mounting trend of drug abuse is to be reversed. The closeness of the effort needed is a condition that both the school and the community organizations will find unfamiliar, but melding of community effort is essential if the common objectives are to be met.

The tasks described above will require significant, long-term financial support and commitment. They will also require wise, perceptive leadership from national and state levels. An effective program of broad-based education should produce significant results by the end of the decade.

Interdisciplinary Panel

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PREFACE

The Tacoma Public Schools firmly believe that education for health should be an integral part of the total educational process. The school must have a comprehensive, sequential health curriculum, K through 12, which will provide a framework for helping meet the health needs of youth, as well as helping prepare them for their future roles as parents and citizens. Such a curriculum should serve as a guide for interested, qualified teachers who, provided adequate time for instruction and authoritative current materials, can make education for health a lively area tuned in on critical issues. This fall our district health curriculum guide, based on the Washington State Health Education guide with adaptation and revision by Tacoma teachers, will be completed and available.

During the past year, while committees were still working on the guide, the Tacoma Public Schools were invited to participate in a comprehensive community program aimed at the prevention and reduction of drug abuse. This program, funded by OEO and operated through the Tacoma Narcotics Center, provided funds for the Tacoma Public Schools to operate within its health education program a special program with major emphasis on drug use and abuse. In carrying out the health education component of this program, a curriculum development project was undertaken, educational materials were evaluated and purchased, and selected teachers were asked to try the drug use and abuse units in their classrooms. The materials were then revised in light of classroom experiences and are now ready for a wider trial at the sixth grade, junior high and senior high levels.

We do not subscribe to the philosophy of instituting crash programs and piecemeal efforts to focus on one health problem. Such fragmentation has proved to be largely ineffective in the past. We do subscribe to the philosophy that health is a unified concept and must be approached with consideration given to all aspects of the total human being--physical, mental, emotional and social--and the complexity of forces which affect human behavior. Viewed in this light, drug use and abuse, one of the critical issues facing youth, must be incorporated at the appropriate time and place into the framework of an existing curriculum. This approach offers students the best opportunity to avail themselves of scientific information, to examine their own attitudes and those of their peers and adults, and to reach educated decisions concerning health practices in relation to drug use and abuse. Therefore, these units will be incorporated into our overall Tacoma Public Schools health curriculum guides.

We appreciate the financial assistance provided by OEO through the Tacoma Narcotics Center; we acknowledge the leadership and basic groundwork supplied through the Washington State Health Education guides; and we value the moral support and guidance and the specialized knowledge shared with us by the Tacoma Police Department, the Tacoma-Pierce County Health Department, the Pierce County Juvenile Court and members of the medical, psychological and pharmaceutical professions.

Angelo Giaudrone

Angelo Giaudrone, Superintendent

ACKNOWLEDGMENTS

Many people helped make this project a reality. Interested citizens, community representatives of professional groups, colleagues in voluntary health organizations, and officials in governmental departments all cooperated in furnishing background material, scientific information and ideas and suggestions.

The Pupil Personnel Services of Tacoma Public Schools gave interest and support. Particular recognition is due the Health Services staff and school counselors who contributed time and effort and shared the thinking and writing chores with us.

The major tasks fell to staff members who performed these services:

1. Developing the original materials--formulating concepts, creating learning experiences and preparing bibliographies
2. Using these specific sample curriculum materials in classrooms
3. Evaluating their experiences and revising the materials accordingly
4. Interpreting the need for and the use of these materials to others

The culmination of this curriculum project represents their interest, enthusiasm and hard work.

Elementary

Norbert Ellingson - 6th, Whitman
Harry Erbele - 6th, Bryant
Nancy Guthrie - 4th, Whittier
Don Kvamme - 6th, Lowell
Robert Nugent - 6th, Stanley
Jerry Ramsey - 5th, Lister
Richard Vargo - 5th, Edison
Jerry Woods - 6th, Stanley
Sandra Johnson - School Nurse
Winifred Nelson - School Nurse
Daryl Smith - Counselor
Thelma Gilmur - PEP, Health Education Resource Teacher

Junior High School

Jacqueline Arps - Gault
Robert Collins - Baker
Walter Fitzpatrick - Gault
Sally Granquist - Mason
Betty Johnson - Jason Lee
Paula Lizberg - Baker
Pamela McGee - McIlvaigh
Margaret McGregor - Hunt
Herman Magnuson - Gray
Gloria Pessemier - Gray
Joe Peterson - McIlvaigh
Rupert Rhinehart - McIlvaigh
Dorothy Scott - McCarver
James Caughlin - Counselor
Ronald Lundquist - Counselor
Sylvia Wilson - School Nurse

Senior High School

James McDonald - Mount Tahoma
Thomas Medak - Stadium
Margaret Riebe - Lincoln
Ethel Stamatakis - School Nurse - Wilson
John Vitrollo - Counselor - Stadium

Peggy Kopf - Health Educator, Tacoma-Pierce County Health Department
Mardell Buffington, Assistant in Curriculum - Health Education
Nora Page Hall - Director of Health Education
Orvis A. Harrelson, M. D., Director of Health Services

PREFACE

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CONSUMER HEALTH

Overview

The American public spends billions of dollars each year for health care. Yet another billion dollars is spent on fraudulent products and services. A background in consumer health is helpful protection from the exploitation and dire results of health abuse, neglect and quackery.

What people believe and the types of decisions and actions they take in the selection and utilization of health information, personnel, products and services are major determinants in the quality of health attainment. The individual's protections from fraudulence is primarily through his own ability to select critically and to wisely use products and services.

Material on food fads and quackery is omitted here because it is included in the Nutrition Unit. Content on cosmetics has its greatest emphasis under body care and grooming and is included in the Anatomy and Physiology Unit. At the elementary level, concern is for developing attitudes toward health personnel and services because the youngsters are not yet choosing for themselves. Concern at the elementary level is also for safety in the use of health products.

COMPETENCIES

Competency I: Students discriminate critically between reliable and unreliable health information and advertising of health products.

Competency II: Students use discriminating judgment in the selection and use of drugs.

Competency III: Students avoid the dangers of medical neglect, self-diagnosis and self-treatment for themselves and others for whom they have a responsibility.

Competency IV: Students select and make intelligent utilization of qualified and competent medical, dental and allied health personnel and services.

Competency V: Students use discriminating judgment in evaluating and selecting reliable medical, hospital, health and accident insurance protection and understand the costs of comprehensive medical care. (secondary level)

Competency VI: Students appreciate the roles and functions of health agencies and their responsibilities in supporting and promoting health programs.

COMPETENCY I: Discriminate critically between reliable and unreliable health information and advertising of health products.

CONCEPTS--Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
There are sources of reliable health information.	Tape record radio or televison commercials relating to children's health and help children evaluate and discuss advertising (avoid personal prejudices). Create a poster from class-developed criteria for evaluating the reliability of health information. Students list sources of health information cooperatively. Have students rate individually and then tabulate and use for discussion. Student teams develop advertisements for a fictional brand of health product such as toothpaste and present to class. Class members decide which brand they would buy and discuss reasons for choices. Develop criteria for selecting and purchasing personal health products by reviewing cost, claims, who recommends, manufacturer, etc. of various common products. Student visit and interview: Better Business Bureau Police Department	1.1 1.10 1.12 1.15 1.16 1.19 1.23 1.24 2.2 4.10 4.11 1.9 1.10 1.15 1.16 1.17 1.18 2.2 2.7 2.8 2.9 2.23 6.4 13.1
Some health products are harmful to our health	Use resource 2.2 to develop individual posters or essays titled "How to Spot a Quack," - fad, fallacy. Create cut-paper "Quack Machines" and write advertising using the gimmicks of the quack, i.e., testimonials, scare technique, sure cure, etc. Have a skit illustrate how a quack might operate in selling a service.	

CONCEPTS-- Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
Some superstitions are harmful to our health.	Encourage students to check with parents and friends and list some common superstitions about health. Make a notebook of health superstitions. On other pages of this notebook collect health information and evaluate as to whether it is realistic or questionable. Write and perform a play: "The Medicine Man of the Old West." Write dialogue for two identical-appearing doctors; one speaks as a quack, the other a qualified physician--play guessing game in class as to which is the quack.	6.1 6.2 6.3 6.7 6.9 6.10 6.12 6.19 6.30 11.2 12.1 12.2

II. Use discriminating judgment in the selection and use of drugs.

CONCEPTS--Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
People use drugs for various reasons because of their effects on the body.	Develop a definition for the term "Drugs" by using information from a variety of sources, i.e., encyclopedia, dictionary, medical dictionary, World Health Organization, newspapers, parents, and young people.	1.22 1.23
	Make a chart of sources from which drugs are obtained: animal, plant, chemical, and mineral.	
	Have students make an appointment with a physician and tape the interview; replay with listening posts. (Plan ahead of time with the students the questions they wish to ask the physician.) Ethical standards, training, daily work, and requirements for license to practice medicine.	7.13 7.9
	Have committees classify drugs--possible classifications are: stimulants, depressants, hallucinogens and others.	1.22 1.23 2.34
	Have a bulletin board display of empty, clean, drug containers. The display could discriminate between prescription drugs and "over-the-counter" drugs.	
	Do library research: LSD, narcotics, barbiturates, amphetamines, marijuana, etc.	
	Set up a question box. (This also allows shy students an opportunity to ask questions.)	
	Demonstrate some physical effects that drugs have on the body: --Dilation of pupils of the eye (demonstrate by light and darkness in the room). --Increase pulse rate (by physical activity). --Blurred vision (demonstrate by projector out of focus). --Continuous daily application of iodine on green leaf (shows cell destruction). --Show relaxation - obtain a hermit crab or a sea anenome, put into water, add one aspirin or several drops of oil of cloves to water--crab will come out of his shell and sea anenome will stay open, even though touched. --Dissolve two crushed aspirin in about 4 ounces of water and then water seedling plants with this solution - watch their reaction.	
	Share an incident where a drug has been prescribed.	2.31

CONCEPTS--Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
Drugs have helpful and harmful effects.	Bring newspaper advertisements and articles for bulletin board and/or individual scrapbooks. Try to distinguish between facts and opinions Develop understanding of term "side effects" as related to drug use.	2.18
	Read labels on medicine bottles to learn about "side effects" as related to drug use.	3.7
	Visit a hospital to see helpful aspects of drugs.	7.12
Federal, State and local regulations govern the use of drugs.	Visit a pharmacist or invite one to speak about the regulations for the sale of drugs; drugs that are available across the counter and those prescribed by a doctor and why; what drugs he sells the most; the meaning of colored bottles; training for pharmacy, etc. (Tape and replay with listening posts.)	2.24
	Ask the school nurse to come and talk about why she can't give drugs to students.	
	Write letters to the Food and Drug Administration, Consumer Specialist, First and Madison, Room 501, Seattle, to see how medicine is legalized. (Allow three weeks for reply.)	2.7 2.34
	Have a committee make an appointment to see someone from the Police Department to discuss laws about drugs. (Interview could be taped.)	7.6
	Contact the Police Department and have someone come to your class to discuss the laws governing drugs.	7.6
	Do research on State and Federal laws relating to drugs.	11.7
The individual has responsibilities in the use of drugs	(Note to teacher: Respect individual's religious belief concerning drugs.)	

CONCEPTS--Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
The individual has responsibilities in the use of drugs (continued)	Explore ideas such as: hippie movement, nonconformity, generation gap.	
	Dramatize a situation where you are dared to take an unknown substance.	
	Have a physician visit the classroom and discuss drug abuse. (Prepare a list of questions prior to visit.)	7.7 7.8
	Construct a medicine cabinet of paper or wood - stress locks.	
	Have student-parent campaign to "clean-out" the medicine cabinet - stress locks.	
	Exhibit an adequately equipped first-aid kit for the family car and demonstrate its storage and use.	

CONCEPTS--Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
The individual has responsibilities in the use of drugs (continued)	What is wrong?	
	Dramatize a student attempting to sell pills to a younger student.	2.7
	Grampa comes to visit and has a big bottle of aspirin in his suitcase.	2.9
	Mother gives little baby brother aspirin and tells him it is sweet, like candy.	2.18
	Father wakes in the night with a sore shoulder, goes to the medicine cabinet, feels for the bottle and shakes two pills out of it and swallows them.	2.24
	Big sister has the flu and pours her medicine into a glass and just guesses that it is two teaspoons.	
	Big brother has a headache every day. He takes two aspirins every time he has a headache.	
	Big sister offers some of her medicine to her friend who seems to be coming down with a cold.	
	Discuss the dangers of:	
	Mixing pills in one bottle (possible chemical reaction). Failure to use prescribed dosage. Keeping left-over pills for long periods of time. Sharing prescribed medicines with others.	
	Identify advertising slogans concerning drugs. Discuss good and bad points. Distinguish between facts and opinions.	2.25
	Contrast terminology on prescription and non-prescription drugs.	2.25 2.31
Some people abuse drugs	Have students discuss the reasons why some people misuse drugs.	6.33 9.7
	Read case histories from selected sources.	1.22 1.23
	Make a chart showing dangerous drugs and their effects on the body systems.	2.20
	Write an essay on the danger of taking certain drugs before operating machinery (i.e., antihistamines, depressants, stimulants, etc.)	2.34

COMPETENCY III: Avoid the danger of medical neglect, self-diagnosis and self-treatment.

CONCEPTS--Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
When we are ill, following certain health practices will help us get well	Discuss the things we can do when we are ill to help us get well faster.	4.3
Certain symptoms indicate that we need special health care.	Make posters on the symptoms of a cold.	
	Ask the school nurse to present to class rules and regulations about "When we should stay home" and symptoms of common illnesses of elementary pupils.	
	Make up cases - some requiring professional medical care and some requiring only self-treatment. Discuss best choice---professional help or self-help for each case.	
	Have students give reasons why some children may be on medication; (aid in body repair; control of growth; diagnosis, treatment and prevention of diseases).	2.9 2.34 11.5

COMPETENCY IV: Intelligently select and utilize qualified and competent medical, dental, and allied health personnel and services.

CONCEPTS--Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
Physicians help protect our health.	From cardbcard make various instruments that a doctor uses in his office to check and protect our health; make a mobile of them.	1.2 1.4 1.5 7.6 9.1 9.2 11.2 11.4
Many individuals have contributed to the good health we can have today.	Make an historical mural of health and medical discoveries. Conduct committee research on individuals who have contributed to medical research. (Pasteur, Lister, Reed, Salk) Survey and then develop a bulletin board for the nurse's office on the health services available to students. Interview physicians and dentists with questions developed by the class. (i.e. how often should we be examined, how can students assist the physician/dentist when they see them, etc.) Interview dentist/physician to establish educational requirements. Also inquire about education for specialist; pediatrician, obstetrician, surgeon, general practitioneer, etc.	1.8 2.10 3.1 3.3 3.4 5.7 5.15 6.5 6.6 6.7 6.8

COMPETENCY VI: Appreciate the roles and functions of health agencies and the responsibilities of citizens in supporting and promoting health programs.

CONCEPTS--Sixth Grade	SAMPLE LEARNING EXPERIENCES	RESOURCES
Many health agencies and organizations serve, protect, and inform us to help keep us well.	Write, visit, and read to collect material for oral reports on various community agencies that protect our health (public health departments, hospitals, clinics, fire departments, law enforcement agencies, poison control centers).	1.10 1.14 2.8 2.12 2.29
	Arrange for class to visit supermarket. Look for displays of the things that relate in some way to health.	
	Have students develop a health folder that describes ways in which health information is obtained.	
	Have student committees visit a grocery store for the purpose of inquiring about sanitary inspections that are conducted and other ways that food is kept safe.	
	Have students bring various empty food containers to class. Talk about proper packaging and storing to keep food safe. Discuss refrigeration, frozen goods, storage methods, etc.	
	Have students collect different food labels. Discuss labels and tell about food inside of container.	
	Interview a restaurant owner. Check requirements for serving oleomargine and for the preparation, storage, and serving of food.	
	Interview a butcher or meat handler to find out how meat and poultry are safeguarded. Write a paper as an outcome.	
	Interview newspaperman regarding: newspaper standards for accepting or rejecting advertising.	
Laws and regulations protect our health and the health of others.	Select a health problem in school; as a class project develop and carry out a program to work toward a solution.	
	Outline provisions of the Food and Drug Administration as related to protection for the consumer.	

CONSUMER HEALTH RESOURCES

The resource list is for both the elementary and secondary levels because very little is available on the reading level of the elementary students. The resources, therefore, are for the elementary teacher and hopefully he can modify the information to relate to the level of understanding of his students.

(All books found at the public library are found in the Children's Department, unless otherwise noted.)

1.0 BOOKS

1.1 Packard, Vance O. THE HIDDEN PERSUADERS. McKay, 1957 (Pocket Books) Public Library (adult)

1.2 Dudley, Nancy LINDA GOES TO THE HOSPITAL. Coward McCann, 1953

1.3 MODERN DRUG ENCYCLOPEDIA AND THERAPEUTIC INDEX. Sloan and Pearce. Public Library. (adult)

1.4 Elting, Mary THE FIRST BOOK OF NURSES. Watts.

1.5 Thompson, Frances B. ABOUT DOCTOR JOHN. Children's Press, 1959.

1.8 Lerner, Marguerite R. DOCTOR'S TOOLS. Lerner, 1960. Curriculum Library

1.9 Atkinson, Donald T. MAGIC, MYTH, AND MEDICINE. Fawcett, 1956 (paperback) Public Library (adult)

1.10 Cook, James, REMEDIES AND RACKETS. Norton, 1958. Public Library (adult)

1.12 Deutsch, Ronald M. THE NUTS AMONG THE BERRIES. Ballantine Books, 1961 (paperback) Public Library (Adult)

1.13 Dubos, Rene J. THE MIRAGE OF HEALTH. Doubleday, 1959 Public Library (Adult)

1.14 Editors of Consumer Reports. THE MEDICINE SHOW. Simon and Schuster, 1961. Public Library (Adult)

1.15 Gardiner, Martin. FADS AND FALLACIES IN THE NAME OF SCIENCE. Dover, 1957 (paperback) Public Library (Adult)

1.16 Haggard, Howard. DEVILS, DRUGS, AND DOCTORS. Affiliated Publisher, 1959 (paperback) Public Library (Adult)

1.17 Hemphill, Josephine. FRUITCAKE AND ARSENIC. Little, 1962 (history and stories of the FDA) Public Library

1.18 Pinckney, Edward R. HOW TO MAKE THE MOST OF YOUR DOCTOR AND MEDICINE. Follett, 1964. Public Library. For grade six

1.19 Smith, Ralph Lee. THE HEALTH HUCKSTERS. Crowell Company, 1960. Public Library (Adult)

1.20 Young, James H. THE TOADSTOOL MILLIONAIRES. Princeton University Press, 1961 Public Library (Adult)

1.21 Ottenberg, Miriam. THE FEDERAL INVESTIGATORS. Prentice Hall, 1962, Chapter 10. Public Library (Adult)

1.22 Smith Kline and French Laboratories, DRUG ABUSE: ESCAPE TO NOWHERE. A GUIDE FOR EDUCATOR. 1967 National Education Association, Publication Sales Department, 1201 Sixteenth Street, N.W., Washington, D.C. 20036 ($2.00)

1.23 Kitzinger, Angela and Hill, Patricia. DRUG ABUSE: A SOURCE BOOK AND GUIDE FOR TEACHERS. California State Department of Education, 1967, Sacramento, California (40¢)

1.23b Schramn, Wilbur and others. TELEVISION IN THE LIVES OF OUR CHILDREN. Stanford, 1961, Curr. Lib.
1.24 Kiev, Ari, (Ed.) MAGIC, FAITH, AND HEALING. Free Press. 1964
1.25 Trump, Fred. BUYER BEWARE. Abington, 1965 Public Library (Adult)
1.26 Campbell, Hannah. WHY DID THEY NAME IT. Fleet Publishing, 1964
1.29 Berger, Knite and others. A VISIT TO THE DOCTOR. Grosset & Dunlap, 1960

2.0 FEDERAL AGENCIES

PUBLIC INQUIRIES BRANCH, PUBLIC HEALTH SERVICE, UNITED STATES DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, WASHINGTON, D.C. 20201

2.1 Personal Health Expenses
2.2 The Cancer Quacks

THE FEDERAL FOOD AND DRUG ADMINISTRATION, SEATTLE DISTRICT, FEDERAL OFFICE BUILDING, 909 FIRST AVENUE, SEATTLE, WASHINGTON 98104

2.7 Protect Your Family Against Poisoning.
2.8 Cosmetic--FDA Fact Sheet
2.9 Self-Medication--FDA Fact Sheet
2.10 Quackery--FDA Fact Sheet
2.12 How FDA works for you
2.14 Enforcing the F D A Act, 1968
2.15 Requirements of the U.S. Food, Drug and Cosmetic Act (non-technical) Revised 1968.
2.16 Rainbow Pills--FDA Fact Sheet
2.18 Drug Side Effects--FDA Fact DCR2, October, 1966
2.19 Habit-Forming Drugs, Fact Sheet
Runningawayness
2.23 Dennis the Menace Takes a Poke at Poison
2.24 Some Questions & Answers About Medicine, Fact Sheet
2.25 Medicines: Prescription and Over-the-Counter, Fact Sheet
2.26 Hallucinogenic Drugs
2.27 Thalidomide Story
2.28 Enforcing the Food, Drug and Cosmetic Act.
2.29 Regulations of Federal Hazardous Substances Labeling Act. No. 35. March, 1968
2.30 Protect Your Family Against Poisoning
2.31 The RX Legend, An FDA Manual for Pharmacists, F D A Publication #12, Revised January, 1968 15¢

2.34 Bureau of Narcotics & Dangerous Drugs, Department of Justice, Washington, D.C. 20537
Fact Sheets
no. 1. The Drug Abuse Control Amendments of 1965
2. The Illegal Traffic in Dangerous Drugs
3. The Drug Abuser
4. Depressants
5. Hallucinogens
6. Stimulants
7. Controlled Drugs
8. Hallucinogens - A Select Bibliography
9. Bibliography of Selected Popular References of Hallucinogenic Drugs
10. Stimulants and Depressants - A Bibliography 1964-67

2.35 The Watch For Household Hazards, FDA Papers, March, 1968

CHIEF POSTAL INSPECTOR, UNITED STATES POST OFFICE DEPARTMENT, WASHINGTON, D.C., 20260

2.53 How the Postal Inspection Service Protects You Against Mail Fraud, U.S. Post Office

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE, 330 INDEPENDENCE AVENUE S.W., WASHINGTON, D.C. 20204

2.54 Teaching Poison Prevention in Kindergarten & Primary Grades, Public Health Service Pub. No. 1381, $1.50

3.0 FILMSTRIPS & TRANSPARENCIES

3.1 Health Helpers, EBF
3.2 Dollars for Health ILI
3.3 The Little Pink Bottle, NF
3.4 Checking Your Health, EBF
3.5 Community Helpers for Health, EGH
3.6 Raytheon Filmstrips -- Drugs; Introduction, TPS
3.7 Transparencies: Drugs & Your Body, Brady., TPS

4.0 FILMS

4.2 A New World For Peter, Hanna
4.3 How to Catch A Cold, TPS
4.4 Your Friend the Doctor, Coronet
4.5 Your Doctor, McG
4.6 Choosing a Doctor, McG
4.7 Medicine Man, AMA
4.9 Helping Hands For Julie, WSH
4.10 Myth, Superstition Science, TPS

4.11 Science and Superstition TPS
4.12 Are You Positive, WTA
4.13 Folks, Facts, and Pharmacy, LL
4.14 Quacks & Nastrums, McG
4.21 Fraud Frightens TPS
4.22 Drugs & The Nervous System, TPS
4.23 Beyond LSD--(Adult Group Only)
4.24 Narcotics the Inside Story

5.0 PROFESSIONAL ORGANIZATIONS

AMERICAN MEDICAL ASSOCIATION

5.1 Beware of "Health Quacks" 1962
5.2 Mechanical Quackery
5.3 Did You Know That?
5.4 Medicines & How To Use Them (5¢)

6.0 MAGAZINES

TODAY'S HEALTH

6.1 Dunlop, Richard, "Granny Had A Cure For Everything." May, 1963
6.2 Rosen, Harold, "Hypnosis: The Fad and the Facts." October, 1963
6.3 Wolters, Larry, "The TV Doctors." October, 1962
6.4 Smith, Ralph. "Are You Wasting Your Money on Health Cosmetics"? April, 1961
6.5 Dunlop, Richard. "Doctors Who Helped Win the West." September, 1964
6.6 Dunlop, Richard. "The Paleface: Medicine Man of the Frontier." March, 1964
6.7 Dunlop, Richard. "Quacktitioners in the Old West." November, 1964
6.8 Dunlop, Richard. "How to Spot a Quack."
6.9 Earle, Howard "Iron Curtain of Superstition." April, 1961
6.10 Gamble, Frederic R. "The Importance of Honesty in Advertising." July, 1961
6.11 Kursh, Harry. "Mail Order Quack's Harvest: Dollars and Death." March 1961
6.12 "Primitive Medicine: Magic, Miracle, and Myth." February, 1962
6.13 Balk, Alfred. "Your Headache--Facts and Fallacies." March, 1960
6.14 Cooley, Donald. "A Drug Is Born." September, 1963
6.15 Cooley, Donald. "How Some Drugs Get Their Names." April, 1961
6.16 Cooley, Donald. "Medicines of Tomorrow." Part I, November, 1963
Part II, December, 1963

6.17 Kaplan, Jack. "The Health Machine Menace: Therapy by Witchcraft." February, 1961
6.18 Ratcliffe, I.D. "America's Laxative Addicts." November, 1962
6.19 Smith, Ralph L. "The Strange World of Mechanical Quackery." November, 1964
6.20 Conley, Veronica L. "R.N.--Those Magic Initials." December, 1960
6.21 Donahue, Stephan. "What Is A Dermatologist?" September, 1962

6.22 Donahue, Stephan. "What Is An Internist?" April, 1963

6.23 Earle, Howard. "The Remarkable World Of Dentistry." April, 1963

6.24 "How to Spot A Quack."

6.25 Orphan, Dennis. "A Doctor In The Making." October, 1961

6.26 Terry, Luther L. "What Is A Public Health Physician?" May, 1963

6.27 "What Is A Doctor?" April, 1960

6.28 Earle, Howard. "How To Save Money On Your Health Insurance." February, 1961

6.29 Allman, David B. "Are Medical Costs Too High?" September, 1964

6.30 Ward. "Four Horsemen of Quackery." January, 1965

6.31 Smith, Ralph Lee. "The Face Burners." June, 1966

6.32 Kaplan, Jack. "Doctor Abrams--Dean of Medical Quacks." April 1966

AMERICAN RED CROSS JOURNAL (local chapter) 306 South 7th STREET, TACOMA, WASHINGTON BR 2-3101

6.33 Nolte, Anne, Ph.D., "To Strive, To Seek, To Find.", December, 1967, Vol. 44, No. 3, pp. 5-7

CONSUMER REPORTS--CONSUMER UNION, MT. VERNON, NEW YORK

6.34 False Advertising and Products for the Overweight. November, 1959
6.35 The Medicine Show, 1963 ($1.50)

SCHOOL MANAGEMENT MAGAZINE, INC. , 22 WEST PUTNAM AVENUE, GREENWICH, CONN.

6.36 Editors, "Straight Talk About the Drug Problem" pp.52,53
"Answers to give Basic questions" pp. 57-60
"A Schoolman's Guide to Illicit Drugs, pp. Vol. 12, $1.00

7.0 MISCELLANEOUS

BETTER BUSINESS BUREAU, INC., RUST BUILDING, TACOMA, WASHINGTON 98402

7.4 Service Bulletin (Recent court actions -- health products and devices)
7.5 Facts You Should Know About Health Quackery

RESOURCE SPEAKER (ALL SPEAKERS MUST BE CLEARED THROUGH NORA HALL'S OFFICE, EXT 265

7.6 Tacoma Police Dept., 930 Tacoma Avenue, Tacoma, Washington, FU 3-3311
Youth Guidance Division
Narcotics Division

7.7 Pierce County Pharmacy Association, Mr. Odell Wallace, Bay View Drug, 3401 North Proctor, Tacoma, Washington, SK 9-2222

7.8 Pierce County Juvenile Court, 930 Tacoma Avenue, Tacoma, Washington, FU 3-3311

7.9 Tacoma Public Schools, Post Office Box 1357, Tacoma, Washington, FU 3-1811
Health Services - Ext 288
Health Education - Ext. 265

7.10 Tacoma Pierce County Health Dept., Miss Peggy Kopf, Health Educator, 930 Tacoma Avenue, Tacoma, Washington, FU 3-3311, Ext. 349

7.11 Tacoma - Pierce County Narcotics Center, 1138 Commerce Street, Tacoma, Washington, MA 7-4147

7.12 Mary Bridge Children's Hospital, Director of Nurses, 311 South L Street, Tacoma, Washington, BR 2-1281

7.13 Pierce County Medical Society Speakers Bureau, 734 Broadway, Tacoma, Washington, MA 7-7121

8.0 WASHINGTON STATE AGENCIES

ATTORNEY GENERAL'S OFFICE, TEMPLE OF JUSTICE, OLYMPIA, WASHINGTON 98501

8.1 A Consumer Protection Handbook

9.0 PUBLIC AFFAIRS PAMPHLETS, 381 PARK AVENUE SOUTH, NEW YORK, NEW YORK 10016

9.1 Science Versus Chiropractic
9.2 The Arthritis Hoax
9.5 Buyer, Be Wary
9.6 Your Family's Health
9.7 What We Can Do About Drug Abuse, No. 390

10.0 SCIENTIFIC RESEARCH ASSOCIATES, 259 EAST ERIE STREET, CHICAGO, ILLINOIS

10.1 Facts About Narcotic & Other Dangerous Drugs, Record No. 5-843, 50¢

11.0 VOLUNTARY ORGANIZATIONS

ARTHRITIS AND RHEUMATISM FOUNDATION, WESTERN WASHINGTON CHAPTER, ORPHEUM BUILDING, 1900 FIFTH AVENUE, SEATTLE, WASHINGTON 98101

11.1 Walrad, Ruth. The Misrepresentation of Arthritic Drugs and Devices in the United States

AMERICAN CANCER ASSOCIATION, WASHINGTON DIVISION, 123 WEST HARRISON AVENUE, SEATTLE WASHINGTON 98119

11.2 I Have A Secret Cure for Cancer

WASHINGTON STATE HEART ASSOCIATION, 3121 ARCADE BUILDING, SEATTLE, WASHINGTON 98101

11.3 How The Doctor Examines Your Heart.

AMERICAN SOCIAL HEALTH ASSOCIATION 1740 BROADWAY, NEW YORK, NEW YORK 10019

11.4 Selected Publications on Drug Dependence And Abuse, packet, $2

THE NARCOTIC ADDICTION FOUNDATION OF BRITISH COLUMBIA 300-640 WEST BROADWAY, VANCOUVER, B.C., CANADA

11.5 Psychedelic Drugs
11.6 Marijuana, November 1966

SEATTLE KING COUNTY YOUTH COMMISSION, 611 MUNICIPAL BUILDING, SEATTLE, WASHINGTON, 98104

11.7 Syllabus on Drug Education - April,1968

12.0 MISCELLANEOUS---COMMERCIAL

TEXAS ALCOHOL NARCOTIC EDUCATION, INC. TANE PRESS, 2814 OAK LAWN AVENUE, DALLAS, TEXAS, 75219

12.1 Glue Sniffing: Big Trouble In a Tube, 60¢
12.2 LSD: Trip or Trap, 65¢
12.3 Let's Talk About Goofballs & Pep Pills, 65¢
12.4 The Problem Alcoholic-Narcotics-A Handbook for Teachers, $1

SMITH KLINE & FRENCH LABORATORIES, 1500 SPRING GARDEN STREET, PHILADELPHIA, PA., 19101

12.5 Drug Abuse: The Empty Free Life

13.0 INSURANCE AGENCIES

METROPOLITAN LIFE INSURANCE COMPANY, HEALTH AND WELFARE DIV., 600 STOCKTON ST., SAN FRANCISCO, CALIFORNIA 94120

13.1 Poison and You, 1965
13.2 Profile of a Practicing Physician

TACOMA PUBLIC SCHOOLS
P. O. Box 1357
Tacoma, Washington 98401

CURRICULUM AND INSTRUCTION DIVISION
FU 3-1811, Ext. 265

Joseph P. Lassoie
Deputy Superintendent

S. E. Mazzei
Administrator, Secondary Education

Bertrum O. Myhre
Administrator, Elementary Education

CURRICULUM GUIDE FOR DRUG EDUCATION
JUNIOR HIGH SCHOOL
1968
WORKING COPY
OFFICE OF ECONOMIC OPPORTUNITY GRANT NO. CG8965-A/O

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Angelo Giaudrone

PREFACE

The Tacoma Public Schools firmly believe that education for health should be an integral part of the total educational process. The school must have a comprehensive, sequential health curriculum, K through 12, which will provide a framework for helping meet the health needs of youth, as well as helping prepare them for their future roles as parents and citizens. Such a curriculum should serve as a guide for interested, qualified teachers who, provided adequate time for instruction and authoritative current materials, can make education for health a lively area tuned in on critical issues. This fall our district health curriculum guide, based on the Washington State Health Education guide with adaptation and revision by Tacoma teachers, will be completed and available.

During the past year, while committees were still working on the guide, the Tacoma Public Schools were invited to participate in a comprehensive community program aimed at the prevention and reduction of drug abuse. This program, funded by OEO and operated through the Tacoma Narcotics Center, provided funds for the Tacoma Public Schools to operate within its health education program a special program with major emphasis on drug use and abuse. In carrying out the health education component of this program, a curriculum development project was undertaken, educational materials were evaluated and purchased, and selected teachers were asked to try the drug use and abuse units in their classrooms. The materials were then revised in light of classroom experiences and are now ready for a wider trial at the sixth grade, junior high and senior high levels.

We do not subscribe to the philosophy of instituting crash programs and piecemeal efforts to focus on one health problem. Such fragmentation has proved to be largely ineffective in the past. We do subscribe to the philosophy that health is a unified concept and must be approached with consideration given to all aspects of the total human being--physical, mental, emotional and social--and the complexity of forces which affect human behavior. Viewed in this light, drug use and abuse, one of the critical issues facing youth, must be incorporated at the appropriate time and place into the framework of an existing curriculum. This approach offers students the best opportunity to avail themselves of scientific information, to examine their own attitudes and those of their peers and adults, and to reach educated decisions concerning health practices in relation to drug use and abuse. Therefore, these units will be incorporated into our overall Tacoma Public Schools health curriculum guides.

We appreciate the financial assistance provided by OEO through the Tacoma Narcotics Center; we acknowledge the leadership and basic groundwork supplied through the Washington State Health Education guides; and we value the moral support and guidance and the specialized knowledge shared with us by the Tacoma Police Department, the Tacoma-Pierce County Health Department, the Pierce County Juvenile Court and members of the medical, psychological and pharmaceutical professions.

Angelo Giaudrone

Angelo Giaudrone, Superintendent

ACKNOWLEDGMENTS

Many people helped make this project a reality. Interested citizens, community representatives of professional groups, colleagues in voluntary health organizations, and officials in governmental departments all cooperated in furnishing background material, scientific information and ideas and suggestions.

The Pupil Personnel Services of Tacoma Public Schools gave interest and support. Particular recognition is due the Health Services staff and school counselors who contributed time and effort and shared the thinking and writing chores with us.

The major tasks fell to staff members who performed these services:

1. Developing the original materials--formulating concepts, creating learning experiences and preparing bibliographies
2. Using these specific sample curriculum materials in classrooms
3. Evaluating their experiences and revising the materials accordingly
4. Interpreting the need for and the use of these materials to others

The culmination of this curriculum project represents their interest, enthusiasm and hard work.

Elementary

Norbert Ellingson - 6th, Whitman
Harry Erbele - 6th, Bryant
Nancy Guthrie - 4th, Whittier
Don Kvamme - 6th, Lowell
Robert Nugent - 6th, Stanley
Jerry Ramsey - 5th, Lister
Richard Vargo - 5th, Edison
Jerry Woods - 6th, Stanley
Sandra Johnson - School Nurse
Winifred Nelson - School Nurse
Daryl Smith - Counselor
Thelma Gilmur - PEP, Health Education Resource Teacher

Junior High School

Jacqueline Arps - Gault
Robert Collins - Baker
Walter Fitzpatrick - Gault
Sally Granquist - Mason
Betty Johnson - Jason Lee
Paula Lizberg - Baker
Pamela McGee - McIlvaigh
Margaret McGregor - Hunt
Herman Magnuson - Gray
Gloria Pessemier - Gray
Joe Peterson - McIlvaigh
Rupert Rhinehart - McIlvaigh
Dorothy Scott - McCarver
James Caughlin - Counselor
Ronald Lundquist - Counselor
Sylvia Wilson - School Nurse

Senior High School

James McDonald - Mount Tahoma
Thomas Medak - Stadium
Margaret Riebe - Lincoln
Ethel Stamatakis - School Nurse - Wilson
John Vitrollo - Counselor - Stadium

Peggy Kopf - Health Educator, Tacoma-Pierce County Health Department
Mardell Buffington, Assistant in Curriculum - Health Education
Nora Page Hall - Director of Health Education
Orvis A. Harrelson, M. D., Director of Health Services

COMPETENCIES

Competency I: Students discriminate critically between reliable and unreliable health information and advertising of health products.

Competency II: Students use discriminating judgment in the selection and use of drugs.

Competency III: Students avoid the dangers of medical neglect, self-diagnosis and self-treatment for themselves and others for whom they have a responsibility.

Competency IV: Students select and make intelligent utilization of qualified and competent medical, dental and allied health personnel and services.

Competency V: Students use discriminating judgment in evaluating and selecting reliable medical, hospital, health and accident insurance protection and understand the costs of comprehensive medical care. (secondary level)

Competency VI: Students appreciate the roles and functions of health agencies and their responsibilities in supporting and promoting health programs.

MAJOR CONCEPT: The potential value and danger in drugs exist whenever drugs are used.

CONCEPTS (Junior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
	Pretest (establishes what students know, what they need to know and sets climate that student still has much he can learn).	1.3 1.7 1.8
	Establish a question box for communication and check contents of box regularly. Teacher may answer questions or assign for study.	
Drugs are obtained from many sources.	Have students check home medicine cabinet and see if contents fit into FDA definition of a drug. Bring list. (Teacher may have definitions on board.) Evaluate.	1.2 2.4 2.10 5.1
	Prepare reports on medicines of former days, from nature, etc. Make use of slides, pictures, student photography and overhead projection for presentations.	2.15
	Make a classification tree for the overhead projector (see references, student project). (Flip chart could be constructed or dittos of the tree to use as work sheets.)	2.5
	Form a First Aid in Drug Abuse Committee; after research and interviews with authorities, write brochure to be passed out to other students. (Emphasis on poison and poison control.)	
	Make a world map showing origin, sources, distribution, refining, economic impact of drugs over the world.	1.5 2.3 1.7 2.7
	Have a pharmacist as speaker on different classifications of drugs.	7.2
	Or	
	Send a representative to interview pharmacists with questions prepared by the class. Report and discuss.	7.2

CONCEPTS (Junior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
(Continued) Drugs are obtained from different sources	Make a collage on household poisons, "over-the-counter" drugs, or prescription drugs.	
	Prepare charts and graphs on historical chronology of drug abuse since 1840.	1.7
	Invite a Physician, as a guest speaker, suggested subject--"Drugs and You". (Time limitations of professional people necessitate tape recording of discussion for use in other classes--video-tape ideal.)	7.4 7.7
Drugs cause interaction in the body.	Investigate dangers in self-medication a. What keeps us healthy? What makes us sick? Use of medicine for prevention and cure of sickness. b. Continue discussion and reading to include effects of drugs on general health.	2.6 2.12 2.13 2.14 2.15 2.16 3.7 6.5 11.3 12.1 12.2 12.3 12.4 12.5
	Show and discuss transparencies explaining the effects of drugs on various systems of the body.	3.7 4.4
	Have a committee prepare a diagram showing how substances enter the body by different means and are carried by the blood stream throughout the body. Display on bulletin board for referral.	3.7
	Have student committee interview pathologist at local clinic on drug effects upon tissue.	7.8
Drugs affect different people differently, and some people differently at different times.	Discuss how individuals differ a. Give a vocabulary word, i.e., courage, success, freedom. Have each student define the word on paper, then hand in to teacher who lists meanings on board. Compare definitions and perceptions.	1.1 1.6 1.7 1.8 2.13

CONCEPTS (Junior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
(Continued) Drugs affect different people differently, and some people differently at different times.	b. Hold up piece of colored paper. Let students write down the color. List all differences on board. Note differences in vision. Why? c. Dye two batches of potatoes that are mashed--one blue, one brown (any colors will do). Have students taste. Write reactions. Discuss d. Give a sample of substance, i.e., salt, sugar, flour. Note differences in taste. e. Blindfold student and have him hold his nose--taste test various foods, i.e., raw apples vs. raw potatoes; bread vs. cake.	2.14 2.16 2.17 5.2 6.4 6.5 6.8 11.3 12.5
	Field trip to the University of Washington School of Pharmacy. (One is scheduled each spring on new research on drugs and tissue, 9th gradeonly. See audio-visual catalog for scheduling.)	
	Have student reports on following topics and discuss. (Tape reports for future reference.) a. Effects of drugs on personal health and behavior (aspirin, insulin, tranquilizers, barbiturates, hallucinogens, narcotics). b. Ways people are introduced to the abuse drugs. c. Chromosome split--possible causes, dangers, research, reading reports, birth, etc.	1.2 3.1 11.1 1.5 5.1 12.1 2.3 6.1 12.2 2.5 6.3 12.3 2.10 6.4 12.4 2.12 6.5 12.5 6.7
Individuals use drugs for a variety of reasons.	Construct news bulletin board with various current clippings. May organize into areas of use, such as diet, thrill, escape, new medical research or factual, journalistic, sensational.	1.1 2.2 9.1 1.4 2.7 1.8 2.8
	Play act situations. Sample sheet included (see situation sheet). Acknowledge the differences between adults and young people, example: "generation gap," "adults use alcohol but young people are not suppose to," etc.	
	Develop a court case: Students select topic and set up defense and prosecution. Possible topics: Black market trade Marijuana penalties	

CONCEPTS (Junior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
(Continued) Individuals use drugs for a variety of reasons.	Examine the decision-making process as to how it applies to: a. Human needs and how they are met. b. Formation of habits. c. Reliance upon drugs. d. Non-involvement in drug abuse.	1.7 5.1 5.2 9.1 10.1 12.1 12.2 12.3
	Discuss natural history of drug abuse (i.e., steps leading to drug abuse - time sequence in drug addiction).	
	Discuss with students how they could get involved in drug abuse. Provide the experience of how to make the decision (role-play and discussion) to stay uninvolved.	
	Interview or have student panel with guest panelist, i.e., counselor, juvenile judge, physician, school nurse, professional personnel from Cascadia or Remann Hall.	7.1 7.4 7.8 7.2 7.5 7.9 7.3 7.6
	Compile list of community agencies concerned with drug abuse problems. What are their roles? Responsibilities? Arrange field trips whenever possible.	

1.0 BOOKS

1.1 Soloman, David. Marijuana Papers. Signet, 95¢ (paperback)
1.2 Handbook on Non-Prescription Drugs. A.Ph.A., $4.00
1.3 Today's Health Guide. AMA $4.95
1.4 Time Life Series (Drugs) 1964
1.5 Kreig, Margaret. Black Market Medicine. Bantam, 95¢ (paperback)
1.6 Poisons. Pyramid, 60¢ (paperback)
1.7 Smith Kline and French Laboratories. Drug Abuse: Escape to Nowhere. A Guide for Educators 1967. National Education Association, Publication Sales Department, 1201 Sixteenth Street, N.W., Washington, D.C. 20036 $2.00
1.8 Kitzinger, Angela and Hill, Patricia. Drug Abuse: A Source Book and Guide for Teachers. California State Department of Education, 1967, Sacramento, California, 40¢

2.0 FEDERAL AGENCIES

One copy available from the agency or your congressman. Quantity orders should be sent to: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402

FEDERAL FOOD AND DRUG ADMINISTRATION, DISTRIBUTION AND MAILING UNIT, 200 C STREET S.W., WASHINGTON, D.C., 20204

2.2 Runningawayness. FDA #38. 20¢
2.3 How Safe Are Our Drugs. Publication #44, FDA Life Protection Series, 15¢
2.4 The Rx Legend, An FDA Manual for Pharmacists. FDA Publication, #12, Revised January 1968, 15¢
2.5 The Use and Misuse of Drugs. Life Protection Series. Publication #46, 15¢
2.6 Young Scientists Look at Drugs. FDA Life Protection Series. Publication #45, 15¢
2.7 Drugs of Abuse. FDA Papers, July-August 1967, 20¢
2.8 LSD: The False Illusion, Part I. FDA Papers, July-August, 1967, 10¢
2.9 LSD: The False Illusion, Part II. FDA Papers, September, 1967, 15¢
2.10 Medicines: Prescreiption and Over the Counter Drugs. FDA Fact Sheet, November 1966
2.11 Quackery, FDA Fact Sheet
2.12 Some Questions and Answers About Medicines. FDA Fact Sheet, November 1966
2.13 Rainbow Pills. FDA Fact Sheet
2.14 Drug Side Effects. FDA Fact Sheet, DCR2, October 1966
2.15 Self Medication. FDA Fact Sheet
2.16 Thalidomide. FDA Fact Sheet

2.17 Bureau of Narcotics & Dangerous Drugs, Department of Justice, Washington, D.C. 20537, Fact Sheets

No. 1. The Drug Abuse Control Amendments of 1965
2. The Illegal Traffic in Dangerous Drugs
3. The Drug Abuser
4. Depressants
5. Hallucinogens
6. Stimulants
7. Controlled Drugs
8. Hallucinogens - A Select Bibliography
9. Bibliography of Selected Popular References of Hallucinogenic Drugs
10. Stimulants and Depressants - A Bibliography 1964-67

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE - 330 Independence Avenue S.W. Washington, D.C.20201

2.18 Narcotic Drug Addition, Mental Health Monograph 2, Public Health Service Publication #1021
2.19 Barbiturates As Addicting Drugs, Public Health Service, Publication #545, 5¢

3.0 FILMSTRIPS & TRANSPARENCIES

FILMSTRIPS & RECORDS

Raytheon (suggest using DuKane Projector)

3.1 Introduction to Drugs (Part 1),(Grade 6) TPS
3.2 Barbiturates and Amphetamines (Parts 2 and 3), (Grade 7, 9 and Senior High review) TPS
3.3 Marijuana (Parts 4 and 5), (Grade 7, 9 and Senior High review) TPS
3.4 LSD and LSD Type Drugs (Parts 6 and 7), (Grade 7, 9 and Senior High review) TPS
3.5 Narcotics (Part 8), (Grade 7, 9 and Senior High review) TPS
3.6 Teenagers and Drugs (Parts 9 and 10), (Grade 7,9 and Senior High review) TPS

TRANSPARENCIES

3.7 Drugs and Your Body, Robert Brady Company, (7th Grade) TPS

4.0 FILMS

4.1 LSD: Insight or Insanity. (Grades 9 and Senior High) TPS
4.2 LSD: 25. (Grades 7 and 8) TPS
4.3 Beyond LSD (Grade 9 and Senior High) TPS

4.4 Drugs and the Nervous System. (Grades 6-7) TPS
4.5 Narcotics: The Inside Story. (Grades 6-7) TPS
4.6 Narcotics: The Decision. (Grade 9 and Senior High) (At Grades 7-8 need to discuss this with students in relation to time) TPS
4.7 Narcotics: Pit of Despair. (Grade 9 and Senior High) TPS
4.8 Marijuana. (Grades 7-9 and Senior High) TPS
4.9 LSD - Navy Reserve, FU 3-3577 (Senior High)
4.10 Film Catalogue - Film Library, Washington State Department of Health, Public Health Building Olympia, Washington 98501

5.0 PROFESSIONAL ORGANIZATIONS

AMERICAN MEDICAL ASSOCIATION, 535 N. DEARBORN, CHICAGO, ILLINOIS 60610

5.1 Medicines & How to Use Them, OP63, 10¢

5.2 The Crutch That Cripples--Drug Dependence. Committee on Alcoholism & Drug Dependence Council on Mental Health, OP163, 25¢

PHARMACEUTICAL MANUFACTURER'S ASSOCIATION, 155 FIFTEENTH STREET, N.W., WASHINGTON D.C. 20005

5.3 Medicinal Narcotics Facts on Benefits & Control (free)

NATIONAL EDUCATION ASSOCIATION, 1201 - 16TH STREET, N.W., WASHINGTON D.C. 20036

5.4 Drug Abuse: A Primer for Parents, Stock #051-02102, 5¢

6.0 MAGAZINES

JOURNAL OF SCHOOL HEALTH, 515 EAST MAIN STREET,KENT, OHIO 44240

6.1 Toohey, J.V., Ed. D. "Marijuana-The Evidence Begins to Grow," Vol. 36, No. 5, May 1968 pp. 302-304

6.2 Harmon, Sharon, "LSD: A Meaningful Approach To Drug Education," Vol. 36, No. 6, June 1968, pp. 386-390

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 535 NORTH DEARBORN, CHICAGO, ILLINOIS 60610

6.3 "Dependence on Cannabis" (Marihuana), Council on Mental Health & Committee on Alcoholism & Drug Dependence, August 7, 1967, Vol. 201, No. 6, pp. 108-111.

AMERICAN RED CROSS JOURNAL

6.4 Cron, Theodore, O.M.A.T., "The Uppies & Downies & LSD," Vol. 44, No. 3, December 1967, pp. 13-17

TODAYS HEALTH

6.5 Carner, Charles, "Surprise Inside, Strange Effects of Drugs," April 1967, Vol. 45, No. 4, pp. 56-59 - 72-73

6.6 Davis, Dorothy Crone. "Predicting Tomorrow's Children," January 1968, Vol. 56, No. 1, pp. 32-37

GOOD HOUSEKEEPING

6.7 Editors, "A Medical Guide to Drugs & Family Health," January, 1968, Vol. 166, pp. 161-172

SCHOOL MANAGEMENT MAGAZINE, INC. 22 W. PUTMAN AVENUE, GREENWICH, CONNECTICUT 06830

6.8 Editors, "Straight Talk About the Drug Problem," pp. 52-53. "Answers to Give Basic Questions," pp. 57-60, February 1968; Vol. 12, No. 2 $1.00

LIFE

6.9 Editors, "Scandal of the Diet Pills," January 26, 1968, Vol. 64, No. 4, pp. 22

7.0 MISCELLANEOUS

RESOURCE SPEAKERS (Requests for outside resource people will be coordinated through Health Education, Extension 265)

7.1 Tacoma Police Department, 930 Tacoma Avenue, Tacoma, Washington
Youth Guidance Division
Narcotics Division

7.2 Pierce County Pharmaceutical Association, % Mr. Odell Wallace, Bayview Drug, 3401 North Proctor,
Tacoma, Washington 98407, SK 9-2222

7.3 Pierce County Juvenile Court, FU 3-3311

7.4 Tacoma Public Schools, P. O. Box 1357, Tacoma, Washington, FU 3-1811
  Health Services -- Extension 288
  Health Education -- Extension 266

7.5 Tacoma-Pierce County Health Department, Peggy Kopf, Health Educator, 930 Tacoma Avenue,
Tacoma, Washington 98401, FU 3-3311

7.6 Tacoma-Pierce County Narcotic Center, 1138 Commerce Street, Tacoma, Washington 98402, MA 7-4147

7.7 Pierce County Medical Society Speaker Bureau, 734 Broadway, Tacoma, Washington 98403, MA 7-7121

7.8 Tacoma General Hospital, 315 South K Street, Tacoma, Washington 98405
D. Alan Eagelson, Ph. D., Toxicologist, Department of Pathology, MA 7-1181, Extension 306

7.9 Cascadia Diagnostic Center, Dr. James Zylstra, FU 3-4771, Extension 324

9.0 PUBLIC AFFAIRS PAMPHLET, 381 PARK AVENUE SOUTH, NEW YORK, NEW YORK 10016

9.1 What We Can Do About Drug Abuse, No. 390

10.0 SCIENCE RESEARCH ASSOCIATION, 259 EAST ERIE STREET, CHICAGO, ILLINOIS 60611

10.1 Facts About Narcotics & Other Dangerous Drugs, Reorder No. 5-843,501

11.0 VOLUNTARY ORGANIZATIONS

AMERICAN SOCIAL HEALTH, 1740 BROADWAY, NEW YORK, NEW YORK 10019

11.3 Selected Publications On Drugs Dependence & Abuse, $2.00 (packet)

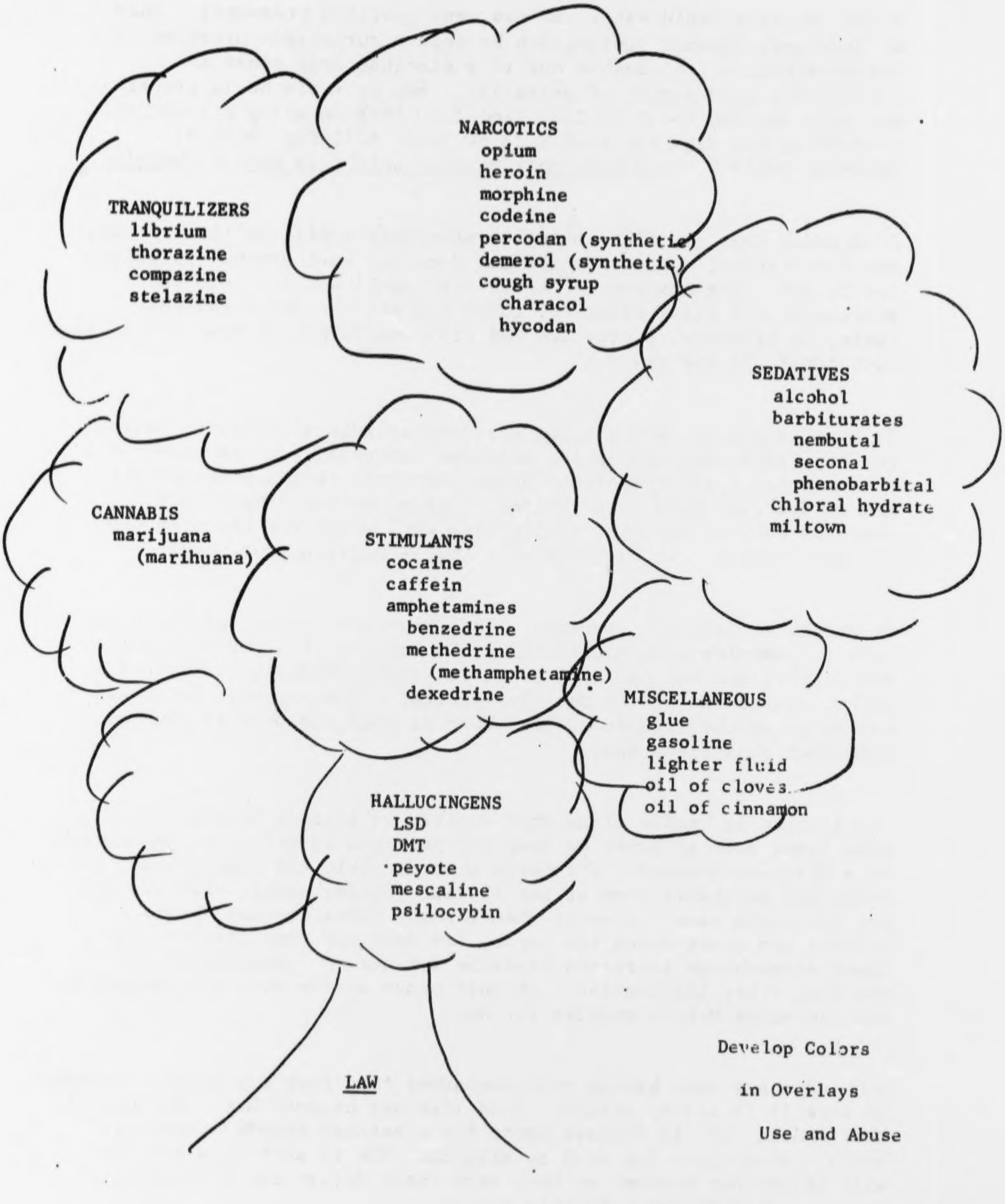
12.0 MISCELLANEOUS--COMMERCIAL

TEXAS ALCOHOL NARCOTIC EDUCATION, INC., TANE PRESS, 2814 OAK LAWN AVENUE, DALLAS, TEXAS 75219

12.1 Glue Sniffing: Big Trouble In A Tube, 60¢
12.2 LSD: Trip Or Trap, 65¢
12.3 Let's Talk About Goofballs & Pep Pills, 65¢
12.4 The Problem Alcoholic-Narcotics-A Handbook For Teachers, $1.00

SMITH KLINE & FRENCH LABORATORIES, Public Relations Department, 1500 Spring Garden Street
Philadelphia, Pennsylvania 19101

12.5 The Empty Life, (free)



Develop Colors

in Overlays

Use and Abuse

1- Mr. D. is a rapid eater, he has many business pressures. When he developed chronic indigestion he wasn't surprisedd- pressure of business etc. -., he dashed out to a discount drug store and purchased a good supply of antiacids. Now he feels he is prepared and will not run short or lose time from this annoying discomfort because in his desk are such aids as Tums, Rollaids, Milk of Magnesia tablets - and many more none of which can ever be harmful.

2- Grandma does not like having so many little pill bottles around. She has heard of hypochondriacs and does not want anyone to think she is one. She has emptied these many small bottles into one attractive old glass cannister which she sets on the breakfast table, it is handy, pretty and she will not forget to take her pills. Good idea? If not why not?

3- Mary is concerned about her children accidentally taking poison. For her family she set up two medicine cabinets. One is under lock and key - all 'dangerous drugs' are kept here and no one but mom or dad ever open this cabinet. The other has simple home remedies such as aspirin, antiseptics etc. which the children can get when needed. Is Mary's plan sound. - explain your answer.

4- Family W. uses many aspirin. They have a chance to get them on sale - 3 bottles each containing 1,000 tablets at a very low price. The bottles are too large to go in the family medicine cabinet so mother stores two in the medicine cabinet - the one that is in use had to go on the kitchen shelf. What is good and what is poor or bad about this situation.

Sue learned in health class that aspirin is aspirin whether it's an name label such as Bayer or made and packaged by her local pharmacist at a discount counter. She feels she must help the family save money and purchases them at the 19 cent counter rather than the 59¢ for the brand name - however whenever she takes one she is so nervous and upset about its purity she does not know whether the upset stomach and increased headache are due to 'impurities' in the drug - her imagination - or just undue stress over the situation. Can you solve Mary's problem for her.

6-Grandpa has been having such backaches they keep him awake, Grandma is sure it is kidney trouble just like her brother had. Fortunately they saw an 'ad' in Sundays paper for a natural remedy - natures herbs - no drugs - for such an ailment. She is sure this must be what helped her brother so they send their dollar for a months supply. What is wrong in this story?

7- Sarah has a very red itching skin - almost a rash. Aunt Jane has an excellent ointment she uses "for just everything". As long as it is only rubbed on the skin no harm can be done so Sarah better quit stalling and take Aunt Janes advice and try it. Is this proper procedure?

8- My friend says she purchased 'over the counter' the very same drug I am taking from a prescription for less than half the price. If I need more when this bottle is gone - I am just going to go to her drugstore and get them over the counter. Are there any pitfalls in this situation?

9- Several boys feel the only way they can really find out about marijauna is to try it once. One time never hurt anyone. They are going to do it at a 'very private party' then they will know and their family will never know and won't have to get 'all shook up about it'. Tom is invited and isn't certain what to do - the pressure is on for 'just this once' - nearly 'all' their friends plan to attend Dick said.

10- Jerry's dad is going to be able to get LSD from a 'chemist' he knows 'well'. The 'stuff' is pure. Under adult supervision surely no harm can result - this is really an opportunity to see what 'this' is all about - no danger involved. Anything wrong with this logic or situation.

11- John goes to mail a letter at the corner drop chute. A nice looking young man is also mailing a letter. This man hesitates and asks John if he'd be interested in trying a few marijauna cigarettes he is 'stuck' with - can give them to him very cheap. Suggests he even split the price with a couple of friends. What should John do? discuss this with the man, run, report the fellow etc?

12- Your little sister (you are 12 yrs. old) has a very severe headache - at least she cries and says her head hurts. You are baby sitting and give her one baby aspirin - after a half hour things are no better. Should she be given more aspirin until she is quiet and goes to sleep - as long as they are only baby aspirin - or - parents called - Dr. called - spank her and put her to bed.

TACOMA PUBLIC SCHOOLS
P. O. Box 1357
Tacoma, Washington 98401

CURRICULUM AND INSTRUCTION DIVISION
FU 3-1811, Ext. 265

Joseph P. Lassoie
Deputy Superintendent

S. E. Mazzei
Administrator, Secondary Education

Bertrum O. Myhre
Administrator, Elementary Education

CURRICULUM GUIDE FOR DRUG EDUCATION
SENIOR HIGH SCHOOL
1968
WORKING COPY

OFFICE OF ECONOMIC OPPORTUNITY GRANT NO. CG8965-A/O

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Superintendent of Schools
Angelo Giaudrone

PREFACE

The Tacoma Public Schools firmly believe that education for health should be an integral part of the total educational process. The school must have a comprehensive, sequential health curriculum, K through 12, which will provide a framework for helping meet the health needs of youth, as well as helping prepare them for their future roles as parents and citizens. Such a curriculum should serve as a guide for interested, qualified teachers who, provided adequate time for instruction and authoritative current materials, can make education for health a lively area tuned in on critical issues. This fall our district health curriculum guide, based on the Washington State Health Education guide with adaptation and revision by Tacoma teachers, will be completed and available.

During the past year, while committees were still working on the guide, the Tacoma Public Schools were invited to participate in a comprehensive community program aimed at the prevention and reduction of drug abuse. This program, funded by OEO and operated through the Tacoma Narcotics Center, provided funds for the Tacoma Public Schools to operate within its health education program a special program with major emphasis on drug use and abuse. In carrying out the health education component of this program, a curriculum development project was undertaken, educational materials were evaluated and purchased, and selected teachers were asked to try the drug use and abuse units in their classrooms. The materials were then revised in light of classroom experiences and are now ready for a wider trial at the sixth grade, junior high and senior high levels.

We do not subscribe to the philosophy of instituting crash programs and piecemeal efforts to focus on one health problem. Such fragmentation has proved to be largely ineffective in the past. We do subscribe to the philosophy that health is a unified concept and must be approached with consideration given to all aspects of the total human being--physical, mental, emotional and social--and the complexity of forces which affect human behavior. Viewed in this light, drug use and abuse, one of the critical issues facing youth, must be incorporated at the appropriate time and place into the framework of an existing curriculum. This approach offers students the best opportunity to avail themselves of scientific information, to examine their own attitudes and those of their peers and adults, and to reach educated decisions concerning health practices in relation to drug use and abuse. Therefore, these units will be incorporated into our overall Tacoma Public Schools health curriculum guides.

We appreciate the financial assistance provided by OEO through the Tacoma Narcotics Center; we acknowledge the leadership and basic groundwork supplied through the Washington State Health Education guides; and we value the moral support and guidance and the specialized knowledge shared with us by the Tacoma Police Department, the Tacoma-Pierce County Health Department, the Pierce County Juvenile Court and members of the medical, psychological and pharmaceutical professions.

Angelo Giaudrone

Angelo Giaudrone, Superintendent

ACKNOWLEDGMENTS

Many people helped make this project a reality. Interested citizens, community representatives of professional groups, colleagues in voluntary health organizations, and officials in governmental departments all cooperated in furnishing background material, scientific information and ideas and suggestions.

The Pupil Personnel Services of Tacoma Public Schools gave interest and support. Particular recognition is due the Health Services staff and school counselors who contributed time and effort and shared the thinking and writing chores with us.

The major tasks fell to staff members who performed these services:

1. Developing the original materials--formulating concepts, creating learning experiences and preparing bibliographies
2. Using these specific sample curriculum materials in classrooms
3. Evaluating their experiences and revising the materials accordingly
4. Interpreting the need for and the use of these materials to others

The culmination of this curriculum project represents their interest, enthusiasm and hard work.

Elementary

Norbert Ellingson - 6th, Whitman
Harry Erbele - 6th, Bryant
Nancy Guthrie - 4th, Whittier
Don Kvamme - 6th, Lowell
Robert Nugent - 6th, Stanley
Jerry Ramsey - 5th, Lister
Richard Vargo - 5th, Edison
Jerry Woods - 6th, Stanley
Sandra Johnson - School Nurse
Winifred Nelson - School Nurse
Daryl Smith - Counselor
Thelma Gilmur - PEP, Health Education Resource Teacher

Junior High School

Jacqueline Arps - Gault
Robert Collins - Baker
Walter Fitzpatrick - Gault
Sally Granquist - Mason
Betty Johnson - Jason Lee
Paula Lizberg - Baker
Pamela McGee - McIlvaigh
Margaret McGregor - Hunt
Herman Magnuson - Gray
Gloria Pessemier - Gray
Joe Peterson - McIlvaigh
Rupert Rhinehart - McIlvaigh
Dorothy Scott - McCarver
James Caughlin - Counselor
Ronald Lundquist - Counselor
Sylvia Wilson - School Nurse

Senior High School

James McDonald - Mount Tahoma
Thomas Medak - Stadium
Margaret Riebe - Lincoln
Ethel Stamatakis - School Nurse - Wilson
John Vitrollo - Counselor - Stadium

Peggy Kopf - Health Educator, Tacoma-Pierce County Health Department
Mardell Buffington, Assistant in Curriculum - Health Education
Nora Page Hall - Director of Health Education
Orvis A. Harrelson, M. D., Director of Health Services

COMPETENCIES

Competency I: Students discriminate critically between reliable and unreliable health information and advertising of health products.

Competency II: Students use discriminating judgment in the selection and use of drugs.

Competency III: Students avoid the dangers of medical neglect, self-diagnosis and self-treatment for themselves and others for whom they have a responsibility.

Competency IV: Students select and make intelligent utilization of qualified and competent medical, dental and allied health personnel and services.

Competency V: Students use discriminating judgment in evaluating and selecting reliable medical, hospital, health and accident insurance protection and understand the costs of comprehensive medical care. (secondary level)

Competency VI: Students appreciate the roles and functions of health agencies and their responsibilities in supporting and promoting health programs.

MAJOR CONCEPT: The Power of Drugs

CONCEPTS: (Senior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
Drugs have increased the life expectancy of man.	Investigate how various drugs affect the body physically.	2.17 2.19 10.1 2.18 6.7 11.3
Background information:		
Certain drugs raise the level of pain perception, alter the emotional reactions and produce calmness and sleep.	Investigate how these drugs affect the body: Codeine, cocaine, morphine and novacain. Also, include synthetic drugs demerol, percodan, nalline and hycodan (cough mixture).	1.7 10.1 1.8 11.3 5.3
Anesthetics have removed some fears of surgery, allowing surgeons to perform more intricate and difficult procedures.	Chart the influence of sulfas, antibiotics, sedatives, stimulants and hynotic drugs on man's life span.	
	Report on uses of anesthetics, tranquilizers, barbiturates and hallucinogens in medicine and dentistry.	2.8 2.16 2.19 2.9 2.17 5.3 2.13 2.18 6.4 11.3
	Through reference reading and interviewing, find out results of overdosing and mixing drugs.	2.14 5.1 6.7 2.15 5.2 10.1 11.3
Drugs must meet rigid research and testing specifications for FDA approval for public consumption.	Gather information on sulfas, antibiotics, sedatives, stimulants and hypnotic drugs by tracing FDA regulations for acceptance of these and other new drugs.	1.2 2.5 2.14 1.3 2.6 2.15 1.6 2.7 4.4 2.3 2.10 4.5 2.4 2.12 11.3
	Invite pharmacist to speak on prescriptions.	7.2
	Invite drug representative to discuss problems of illicit drugs.	7.2

MAJOR CONCEPT: The Power of Drugs

CONCEPTS: (Senior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
People take drugs for a variety of reasons.	Conduct individual surveys among family and friends to find the drugs most commonly used and the reasons for their use.	
	Debate: All drugs are dangerous.	2.3 2.12 5.1 2.5 2.17 10.1
	Monitor mass media drug ads to find quantity, frequency and quality.	
	Interview or invite a toxicologist to speak to the class.	7.8
Background information:	Students list and discuss risks involved in Drug Abuse.	All reference materials
Addiction or habituation. All drugs may be habit-forming and some are addicting.		
Malnutrition. The neglect of food in preference to drugs causes the addict to become poorly nourished and lowers his resistance.		
Infection. Drugs contaminated by unsanitary handling, skin punctured under unhygienic circumstances and use of an unsterilized needle are common sources of infection. Ulceration and abcesses of the skin and hepatitis are common among addicts.		

CONCEPTS: (Senior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
Background information: (continued) Cardiac and respiratory changes or failure. Drugs may stimulate (speed up) or depress (lower) vital physiological processes. Overdoses can result in death. Sensory distortion. Drugs disrupt normal sensory perception, dull and distort judgment and alter normal inhibition. Criminal involvement. Experimentation with narcotics and dangerous drugs may lead to a life of crime. Unprescribed drugs may be obtained only through illegitimate sources. The cost is so prohibitive that the addict usually resorts to crime to support his habit. Unlikely recovery. Follow-up studies show that drug addicts are rarely cured.		
	Mental-Emotional 1. Through reference reading and interviewing find some reasons why a person starts. Include personality and emotional factors, environmental and cultural factors, and psychological factors.	2.2 4.6 2.17 5.2 2.18 6.8 11.3

MAJOR CONCEPT: The Power of Drugs

CONCEPTS: (Senior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
(continued)	2. Through role-playing, panel presentation or group discussion, evaluate how the following items influence individual decisions on the drug issue. a. Social pressure (peer group) b. "Kicks" and adventure c. Use of drugs in sickness d. Immaturity e. Emotional instability	4.1 4.2 4.8
	3. Debate the following questions from "An American Woman and Alcohol," by Patricia Kent. (Tacoma Public Library) a. Do you depend on your family for strength, aid and encouragement? b. Do you defy your parents by telling yourself "you'll show them," but are unconsciously glad they are there to discipline you? c. Would you smoke, use drugs or alcohol to defy your parents? d. Are you afraid to take your place in society? e. Do you isolate yourself physically or socially to avoid being hurt? f. Would you expect drugs to be the answer to your misfortunes	4.3 4.8

MAJOR CONCEPT: The Power of Drugs

CONCEPTS: (Senior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
(continued)	4. Interview a guest speaker, psychologist or a psychiatrist on mental problems associated with narcotics.	7.9
	5. What are the values of any drug abuse; compare with the disadvantages.	4.9
	Social 1. Read biographies of narcotic addicts describing physical effects. The following is an example of one person's actions in obtaining and using drugs.	4.10
	"Our Drug-oriented Culture" - what happened.	
	a. Sleeping pill - taken at bedtime.	
	b. Woke up with cold - took nose drops.	
	c. Started coughing - took throat lozenges.	
	d. By noon still felt under the weather, tried friend's multi-purpose flu remedy.	
	e. Before dinner diet pill	
	f. After dinner ulcer pill	
	g. Went to party - had a few drinks	
	h. Early morning fishing trip -- took motion sickness pill (dramamine (brand name) which is antihistamine).	

MAJOR CONCEPT: The Power of Drugs

CONCEPTS: (Senior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
(continued)	i. By mid-day felt tired--drink a few beers.	
	j. Driving home--fell asleep. John had a crash. Autopsy showed overdose of drugs.	
	k. SUMMATION--Taken independently under medical supervision, these drugs may be useful. Taken in combinations these drugs may be lethal.	
	2. Through reference reading and interviewing, find out results of overdosing and mixing drugs. For example, alcohol and barbiturates, glue and beer, glue and antihistamines, and gasoline and amphetamines.	All reference materials
	3. Have class define these terms: conformity protest security integrity drug abuse hippie hippie movement generation gap revolt Discuss these in relation to the drug scene.	
Control of drug abuse is difficult.	History, law and enforcement 1. Interview or invite a police officer to describe handling of narcotics problem in community.	7.1
	2. Investigate and chart extent of drug activity in Tacoma.	7.1
	3. Conduct school or class survey to discover extent of drug use.	

MAJOR CONCEPT: The Power of Drugs

CONCEPTS (Senior High)	SAMPLE LEARNING EXPERIENCES	RESOURCES
(continued)		
	4. Discuss how the community might help in the treatment and rehabilitation of addicts. Get professional reaction to your suggestions.	7.1 7.6 7.3 7.7
	5. Debate United States versus England's method for controlling the use of narcotics.	1.7 11.3 1.8
	6. Report on the research underway on Marijuana.	6.1
	7. Discuss parental responsibilities in the prevention of drug abuse among young people.	
	8. Develop suggestions on how young people may alert their parents and other adults to the dangers of drug abuse.	

1.0 BOOKS

1.1 Soloman, David. Marijuana Papers. Signet, 95¢ (paperback)
1.2 Handbook on Non-Prescription Drugs. A.Ph.A., $4.00
1.3 Today's Health Guide. AMA $4.95
1.4 Time Life Series (Drugs) 1964
1.5 Kreig, Margaret. Black Market Medicine. Bantam, 95¢ (paperback)
1.6 Poisons. Pyramid, 60¢ (paperback)
1.7 Smith Kline and French Laboratories. Drug Abuse: Escape to Nowhere. A Guide for Educators 1967. National Education Association, Publication Sales Department, 1201 Sixteenth Street, N.W., Washington, D.C. 20036 $2.00
1.8 Kitzinger, Angela and Hill, Patricia. Drug Abuse: A Source Book and Guide for Teachers. California State Department of Education, 1967, Sacramento, California, 40¢

2.0 FEDERAL AGENCIES

One copy available from the agency or your congressman. Quantity orders should be sent to: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402

FEDERAL FOOD AND DRUG ADMINISTRATION, DISTRIBUTION AND MAILING UNIT, 200 C STREET S.W., WASHINGTON, D.C., 20204

2.2 Runningawayness. FDA #38, 20¢
2.3 How Safe Are Our Drugs. Publication #44, FDA Life Protection Series, 15¢
2.4 The Rx Legend, An FDA Manual for Pharmacists. FDA Publication, #12, Revised January 1968, 15¢
2.5 The Use and Misuse of Drugs. Life Protection Series. Publication #46, 15¢
2.6 Young Scientists Look at Drugs. FDA Life Protection Series. Publication #45, 15¢
2.7 Drugs of Abuse. FDA Papers, July-August 1967, 20¢
2.8 LSD: The False Illusion, Part I. FDA Papers, July-August, 1967, 10¢
2.9 LSD: The False Illusion, Part II. FDA Papers, September, 1967, 15¢
2.10 Medicines: Prescreiption and Over the Counter Drugs. FDA Fact Sheet, November 1966
2.11 Quackery, FDA Fact Sheet
2.12 Some Questions and Answers About Medicines. FDA Fact Sheet, November 1966
2.13 Rainbow Pills. FDA Fact Sheet
2.14 Drug Side Effects. FDA Fact Sheet, DCR2, October 1966
2.15 Self Medication. FDA Fact Sheet
2.16 Thalidomide. FDA Fact Sheet

2.17 Bureau of Narcotics & Dangerous Drugs, Department of Justice, Washington, D.C. 20537, Fact Sheets
No. 1. The Drug Abuse Control Amendments of 1965
2. The Illegal Traffic in Dangerous Drugs
3. The Drug Abuser
4. Depressants
5. Hallucinogens
6. Stimulants
7. Controlled Drugs
8. Hallucinogens - A Select Bibliography
9. Bibliography of Selected Popular References of Hallucinogenic Drugs
10. Stimulants and Depressants - A Bibliography 1964-67

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE - 330 Independence Avenue S.W. Washington, D.C.20201

2.18 Narcotic Drug Addition, Mental Health Monograph 2, Public Health Service Publication #1021
2.19 Barbiturates As Addicting Drugs, Public Health Service, Publication #545, 5¢

3.0 FILMSTRIPS & TRANSPARENCIES

FILMSTRIPS & RECORDS

Raytheon (suggest using DuKane Projector)

3.1 Introduction to Drugs (Part 1),(Grade 6) TPS
3.2 Barbiturates and Amphetamines (Parts 2 and 3), (Grade 7, 9 and Senior High review) TPS
3.3 Marijuana (Parts 4 and 5), (Grade 7, 9 and Senior High review) TPS
3.4 LSD and LSD Type Drugs (Parts 6 and 7), (Grade 7, 9 and Senior High review) TPS
3.5 Narcotics (Part 8), (Grade 7, 9 and Senior High review) TPS
3.6 Teenagers and Drugs (Parts 9 and 10), (Grade 7,9 and Senior High review) TPS

TRANSPARENCIES

3.7 Drugs and Your Body, Robert Brady Company, (7th Grade) TPS

4.0 FILMS

4.1 LSD: Insight or Insanity. (Grades 9 and Senior High) TPS
4.2 LSD: 25. (Grades 7 and 8) TPS
4.3 Beyond LSD (Grade 9 and Senior High) TPS

4.4 Drugs and the Nervous System. (Grades 6-7) TPS
4.5 Narcotics: The Inside Story. (Grades 6-7) TPS
4.6 Narcotics: The Decision. (Grade 9 and Senior High) (At Grades 7-8 need to discuss this with students in relation to time) TPS
4.7 Narcotics: Pit of Despair. (Grade 9 and Senior High) TPS
4.8 Marijuana. (Grades 7-9 and Senior High) TPS
4.9 LSD - Navy Reserve, FU 3-3577 (Senior High)
4.10 Film Catalogue - Film Library, Washington State Department of Health, Public Health Building Olympia, Washington 98501

5.0 PROFESSIONAL ORGANIZATIONS

AMERICAN MEDICAL ASSOCIATION, 535 N. DEARBORN, CHICAGO, ILLINOIS 60610

5.1 Medicines & How to Use Them, OP63, 10¢

5.2 The Crutch That Cripples--Drug Dependence. Committee on Alcoholism & Drug Dependence Council on Mental Health, OP163, 25¢

PHARMACEUTICAL MANUFACTURER'S ASSOCIATION, 155 FIFTEENTH STREET, N.W., WASHINGTON D.C. 20005

5.3 Medicinal Narcotics Facts on Benefits & Control (free)

NATIONAL EDUCATION ASSOCIATION, 1201 - 16TH STREET, N.W., WASHINGTON D.C. 20036

5.4 Drug Abuse: A Primer for Parents, Stock #051-02102, 5¢

6.0 MAGAZINES

JOURNAL OF SCHOOL HEALTH, 515 EAST MAIN STREET, KENT, OHIO 44240

6.1 Toohey, J.V., Ed. D. "Marijuana-The Evidence Begins to Grow," Vol. 36, No. 5, May 1968 pp. 302-304

6.2 Harmon, Sharon, "LSD: A Meaningful Approach To Drug Education," Vol. 36, No. 6, June 1968, pp. 386-390

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 535 NORTH DEARBORN, CHICAGO, ILLINOIS 60610

6.3 "Dependence on Cannabis" (Marihuana), Council on Mental Health & Committee on Alcoholism & Drug Dependence, August 7, 1967, Vol. 201, No. 6, pp. 108-111.

AMERICAN RED CROSS JOURNAL

6.4 Cron, Theodore, O.M.A.T., "The Uppies & Downies & LSD," Vol. 44, No. 3, December 1967, pp. 13-17

TODAYS HEALTH

6.5 Carner, Charles, "Surprise Inside, Strange Effects of Drugs," April 1967, Vol. 45, No. 4, pp. 56-59 - 72-73

6.6 Davis, Dorothy Crone. "Predicting Tomorrow's Children," January 1968, Vol. 56, No. 1, pp. 32-37

GOOD HOUSEKEEPING

6.7 Editors, "A Medical Guide to Drugs & Family Health," January, 1968, Vol. 166, pp. 161-172

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selected drug education curricula

Drug Abuse Education Unit - Grades K - 12
South Bay Union School District
Imperial Beach, California

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One of a Series

An Interagency Federal Committee was convened in the winter of 1969 under the auspices of the White House to make available to the Nation's schools a variety of State and local curricula for drug education and the prevention of drug abuse. Participating in the Committee chaired by the Office of Education, DHEW, were the Bureau of Narcotics and Dangerous Drugs, Department of Justice; the National Institute of Mental Health, DHEW; and the Office of Economic Opportunity.

As an initial step, the Committee established an Interdisciplinary Panel of non-Government professionals to review some of the drug abuse curricula developed by State and local school systems. Time did not permit a review of all curricula in use throughout the country.

The curricula selected are not recommended for adoption, but are distributed only as resources to assist schools in initiating or improving programs. All schools are encouraged to submit curricula and materials to the National Clearinghouse for Drug Abuse Information. These will be reviewed by the Panel and those selected will be made available to other school systems upon request. Your cooperation will be appreciated.

Selected curricula have been reprinted with the permission of the originating school systems. Single courtesy copies are available from the National Clearinghouse for Drug Abuse Information. An order blank to the Superintendent of Documents, GPO appears on the back of this publication if additional copies are desired.

The National Clearinghouse for Drug Abuse Information, operated by the National Institute of Mental Health, is the focal point for Federal information on drug abuse. The Clearinghouse provides information on request through publications, and a computerized information service. The Clearinghouse distributes publications and refers specialized and technical inquiries to Federal, State, local, and private information resources. Inquiries should be directed to the National Clearinghouse for Drug Abuse Information, Educational Services, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

INTRODUCTION

The problem of drug abuse is not a new phenomenon. Man's use and abuse of drugs dates back thousands of years. In recent years, however, the dimensions of the problem have reached frightening proportions, raising the specter of societal suicide. Contributors to our current concerns have been the easy accessibility of a myriad of drugs, a tense, stressful social environment, thrill seeking and escapism, among others.

In addressing itself to so complex a problem the discipline of education must go beyond mere dispensing of information and make a stronger effort to effect student attitudinal and behavioral change. The more traditional teaching methods will be inadequate to do the task. This implies the need for broadscale teacher training and retraining in new approaches and techniques. Periodic reinforcement will be needed if the operational style of the classroom is to change. What is required is a long-range view that will aim at the preparation of health educators and other school personnel who can address themselves to this and other serious health problems.

There must also be cooperation and involvement of all other segments of the community in a joint effort with the school if the mounting trend of drug abuse is to be reversed. The closeness of the effort needed is a condition that both the school and the community organizations will find unfamiliar, but melding of community effort is essential if the common objectives are to be met.

The tasks described above will require significant, long-term financial support and commitment. They will also require wise, perceptive leadership from national and state levels. An effective program of broad-based education should produce significant results by the end of the decade.

Interdisciplinary Panel

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Imperial Beach, California

Grateful appreciation is given to Mrs. Betty G. McCormick, General Supervisor, South Bay Union School District; Dr. Peter Frank, Curriculum Coordinator, San Diego County Department of Education; Dr. Angela Kitzinger, Professor of Health Education, Consultant in School Health Education, California State Department of Education; Clifford L. Hatch, Director of Guidance, South Bay Union School District; and to the teachers and parents who so willingly participated in the pilot project.

DRUG
ABUSE
EDUCATION

Grades: K - 3

SOUTH BAY UNION SCHOOL DISTRICT

DRUG ABUSE EDUCATION

A Drug Abuse Education Unit for Kindergarten, Grades One, Two and Three

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DR. ROBERT N. BURRESS
Superintendent

Published by
The South Bay Union School District
601 Elm Avenue
Imperial Beach, California
92032

January 1969

FOREWORD

In the South Bay District we are vitally concerned with helping our children develop knowledge and attitudes that will enable them to handle the drug problem when they are confronted with it. We conducted a pilot program at three grade levels during the 1967-68 school year. As a result of that experience and our continuing concern in the area of health and social awareness we have prepared this publication to help our teachers work with children.

We are committed to a positive approach of teaching an attitude toward care of the body and pride in oneself that will give our children some background to meet the decisions they will have to make as they grow older. We also plan to teach them basic facts about drugs and other injurious substances that will help re-inforce these positive attitudes. This program has the wholehearted support of our Board of Trustees and has met with good general acceptance in our community.

Dr. Robert N. Burress
District Superintendent

South Bay Union School District

601 Elm Avenue

Imperial Beach, California 92032

ACKNOWLEDGMENTS

The South Bay Union School District wishes to acknowledge and thank members of the Board of Trustees who gave their approval to proceed with a pilot study in Drug Abuse Education; and the parents and teachers for their participation in piloting this study. We wish also to give special credit to Peter R. Frank, Curriculum Coordinator, San Diego County Department of Education, and Dr. Angela Kitzinger, Professor of Health Education, Consultant in School Health Education, California State Department of Education, who gave many dedicated hours as consultants and provided encouragement. Teachers who participated in the pilot study in Drug Abuse Education were allowed to be creative, and a number of their ideas are incorporated into this guide.

Pilot Study - DRUG ABUSE EDUCATION

Participating Teachers

Beaky, Antoinette
Hammons, Susan
Hatcher, Barbara
McCauley, Elizabeth
Pasco, Polly
Schattenstein, Richard
Schramm, Maxwell
Strawhun, Frances
Vogt, Susan
Wolf, Alan

Advisors to the Study were:

Frank, Peter R.
Hatch, Clifford L.
Kitzinger, Angela
Mc Cormick, Betty G.

This Unit was developed by:

Pagard, Mona

Permission to reproduce and incorporate "About Drugs" was given by authors Les Landin, Vice Principal, Redwood School, Saratoga, California, and Haskell Bowen, former Director of Drug Abuse Education Santa Clara County Public Schools.

Acknowledgment

INTRODUCTION

As parents and teachers we are caught in the confusion surrounding the tremendous increase in the use of drugs in our society. We become anxious because we do not clearly comprehend how this has come about nor can we find consensus, even among the experts, for a solution.

One thing seems clear, however, we must not let our anxieties drive us to try solutions which stem more from hysteria and bigotry than from knowledge and honesty about drugs, ourselves, and our society.

In face of this engulfing confusion, children need to have the best knowledge we can obtain about drugs. There is little use in our attempts to control them through our own biasis or platitudes. Information about drugs, their dangers, and their benefits must become common knowledge not only for youth but for those of us who attempt to work with them. Only through a realistic understanding of our world can we hope to open up the barriers to communication with our children which seem causal, at least in part, to the present dilemma. If we fail them in this respect we cannot ask for their trust in other areas.

We live in a society which provides limitless opportunity for children to discover and become informed about any and all topics and we must never underestimate the potency of the peer group as a teacher. As adults, both parents and teachers, we must learn to respond to youths' discovery of the world and their perception of it (which may differ from ours) with candor and acceptance of their desires and abilities to participate in meaningful social decisions.

It seems unhelpful to perpetuate our refusal to take them seriously in the consideration of this flood of social issues which affect us all and their future most directly.

Perhaps our deepest concern at this time should be to help our young people develop effective concepts about themselves and positive feelings about our society rather than devising more elaborate and repressive outside controls on their behavior which we can neither justify or enforce.

Clifford L. Hatch
Director of Guidance Services

INTRODUCTION

We live in a drug oriented society, where children are saturated with the wonders of drugs from the time they are first able to see television commercials on aspirin and geritol. Children accept drugs as a necessary part of society. The problem arises when they have to differentiate between the legal and the illegal. How are we to explain the difference between the drugs the doctors prescribe for them and the drugs that are used for illegal purposes? How do we explain the drugs accepted by their parents and the drugs they learn about in school? The teacher's role is one of prevention, familiarizing pupils, making them aware and to build a base in human values. We cannot and must not use fear tactics. Research indicates that police tactics and negative attitudes are not effective. Children's attitudes are not changed by these methods. Neither must we dwell on hard narcotics, but especially at the elementary school level, we must approach drug abuse problems from a positive viewpoint. The secret is THE HOW, THE WHY, AND WITH WHAT ATTITUDES do you present Drug Abuse Education.

The key is one of building proper attitudes, teaching decision making, working from the concept and appreciation of the human body. Basic to developing attitudes and appreciation is how do you solve your problems, what do I have with which to meet life?

Citizenship needs to be stressed. Another of the teacher's responsibilities is to point out the relationship of drugs and being a good citizen. The basic concept of the laws being challenged is another aspect on which we must work. As citizens we need to learn respect for the law.

The problem with our age level children is not so much one of marijuana, heroin, and hard narcotics, but one of teaching values, and one of producing mentally healthy and socially adjusted children.

We are already teaching the effects of alcohol and tobacco, as required by State Law. In teaching about drug abuse as in all curriculum areas, we must avoid lecturing and moralizing. The underlying concept of the program is one of responsibility, responsibility to ourselves and to others. We must stress reason and awareness as opposed to punishment, fear and morality. Positive and negative aspects must be stressed, but not dwelled upon. These concepts are not only about drugs, but about people. We want to produce behavioralistic change. Guidance of the child's emotional and social development is most important. The strongest deterrent to drug abuse in the child's future lies in his strength of character in his ability and determination to face life and enjoy it through the wholesome understanding and constructive use of his own resources.

(Mrs.) Betty G. McCormick
General Supervisor

OBJECTIVES

Drug Abuse Education as part of the total curriculum in the South Bay Union School District has the following goals:

1) To build the self concept; good attitudes towards self.

2) To give instruction in decision making to children to enable them to make decisions.

3) To develop appreciation for the human body.

4) To develop responsibility to self and to others.

5) To build good citizenship - respect for the law.

6) To promote parent involvement

   a. by creating an environment in the home where there there is a positive value orientation.

   b. by bringing enlightenment and correct information into the home ... in order to help eliminate misinformation.

STRANDS - TIME SCHEDULES

There are four strands included in the program:

1) Volatile Chemicals
2) Health and Appreciation of the Human Body
3) Advertising Propaganda
4) The Law

Time Schedules are as follows:

Kindergarten ...	Two weeks	-	15 - 30 minutes daily		
Grade One	Two weeks	-	15 - 30 minutes daily		
Grade Two	Two weeks	-	15 - 30 minutes daily		
Grade Three	Six weeks	-	30 - 45 minutes per day	-	Three times per week
Grade Four	Six weeks	-	30 - 45 minutes per day	-	Three times per week
Grade Five	Six weeks	-	60 minutes or more per day	-	Three times per week
Grade Six	Six weeks	-	60 minutes or more per day	-	Three times per week

Length of time, daily, is dependent upon pupil interest.

DRUG ABUSE EDUCATION
Preliminary Guide

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Grades: K - 3

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BOLD OBJECTIVE: Children appreciate good health and good attitudes. Grades: K - 3

Learnings	Pupil Experiences	References
Children learn what their healthy bodies can do so they will appreciate them.	Children might make scrapbooks showing pictures of things boys and girls can do when they feel well and are healthy, i. e., skipping, swimming, running, picnicking, jumping, etc.	Things That Grow, Eggleston, Joyce Do You Move as I Do, Borton, Helen
	Pupils might enjoy Puppet Presentations ("Droopy Bear" and "Peppy Frog" were used in one Kindergarten class). These puppets could be used throughout the unit to act out various experiences.	FS 2626 We Grow Health I pp. 71-75
	Animal characters or astronauts made of construction paper and put together with brads could be used to show how the body moves.	Health 2 Ch. 6 Your Body and How it Works, Lauber, Patricia
	Observe young guppies or other animals growing.	
	Discuss what our body does - the different functions.	True Book of Your Body and You, Hinshaw, Alice
	Discuss what would possibly be different with the loss of each of the senses.	MP 2043 Growing Up Day by Day
	Exercise: Stretching and moving in many various ways, "Simon says______."	Health 3 pp. 38-51
	Drawing or paintings of self. Older children cut out pictures of sport stars in action.	Your Body and How it Works, Lauber, Patricia
	"The little (boy or girl) who could."(game) Children stand in a circle and each one takes a turn showing what he can do; also can be done outside in play area.	
	Children draw pictures of what they like to do best.	

THE FOLLOWING ARE STORIES, POEMS, OR PICTURES FROM THE 1969 ADOPTED READING TEXTS AS THEY APPLY TO THE SPECIFIC OBJECTIVE OUTLINED IN THIS CURRICULUM GUIDE.

Grades: K - 3

BROAD OBJECTIVE: Children appreciate good health and good attitudes.

What Our Bodies Can Do

"Something Mark Can Make," pp. 45-50 (OUTDOORS & IN Preprimer 2) Harper and Row

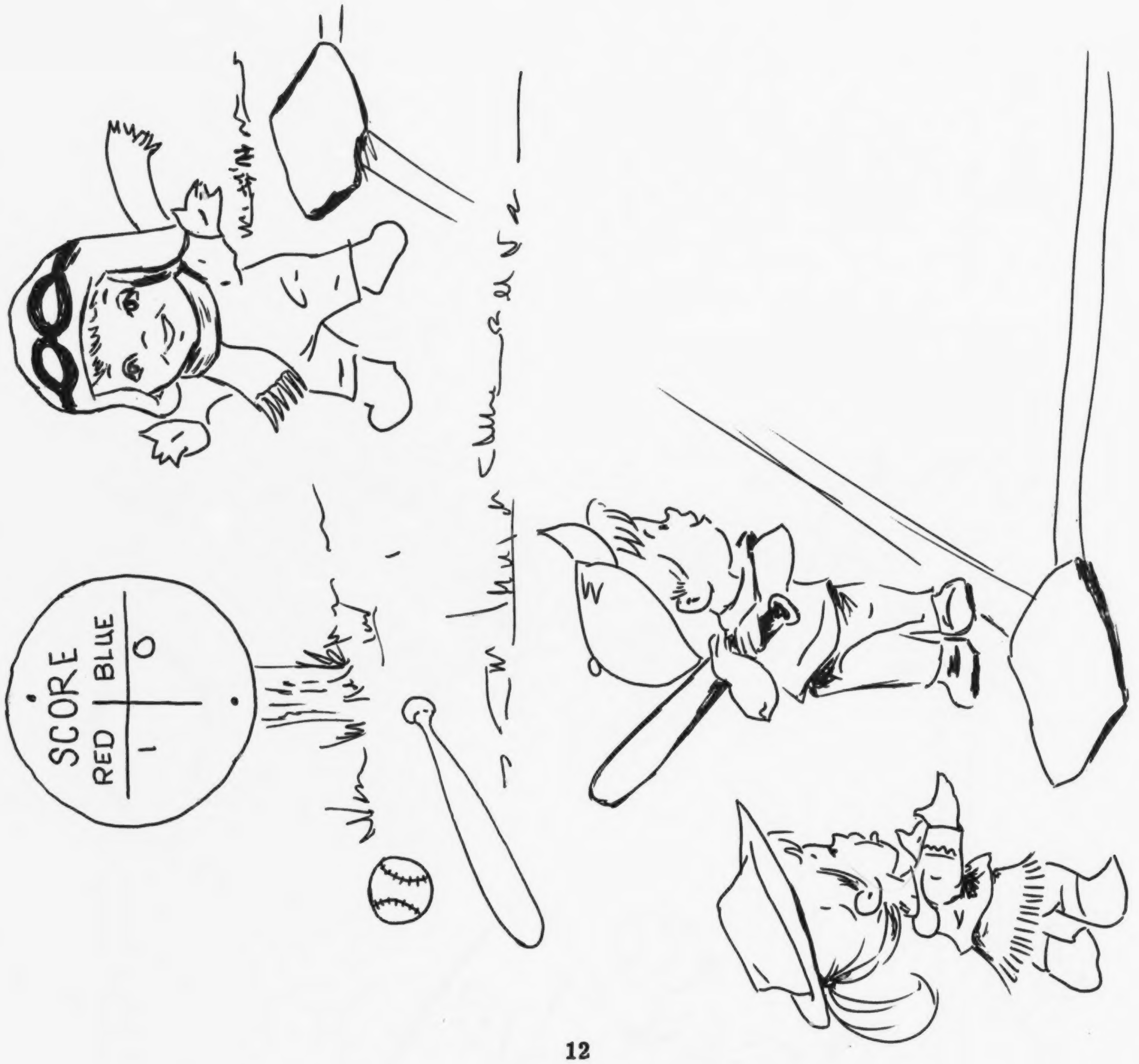
"The End," pp. 11-21 (SOUNDS AROUND THE CLOCK 1) Bill Martin, Jr. (The story of growth from 1 - 6 years old)

"Big Frogs, Little Frogs" (SOUNDS AROUND THE CLOCK 1) Bill Martin, Jr. (The story of a frog's life from egg to frog)

"Joey Kangaroo," pp. 104-121 (SOUNDS OF LAUGHTER 2) Bill Martin, Jr. (The story of a kangaroo and how he grows)

"Growing Up, Growing Older," pp. 146-167 (SOUNDS OF LAUGHTER 2) Bill Martin, Jr.

"Can Your Brother Talk Yet?" pp. 13-19 (ROUND THE CORNER 3^2) Macmillan (Best friends Nina and Betsy compare notes on the developmental achievements of babies in their families. The two girls express their pride in being allowed to take care of their new brother and sister) *Note: This story could also be used when talking about how children can protect others in their family.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Our Bodies Can Do Many Things
FIRE CHIEF

Bulletin Board

Appreciation of the Human Body

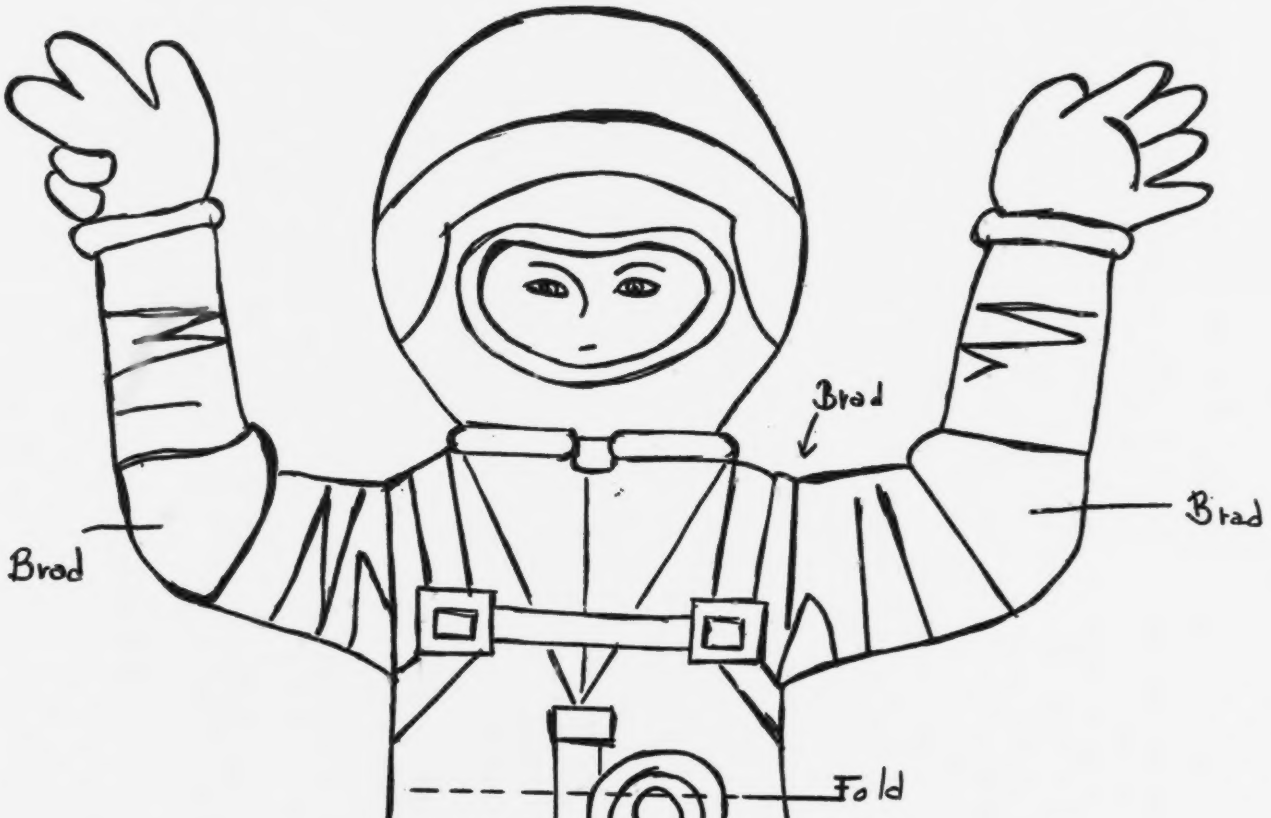
Questions for Discussion:

(1) Which ways can our bodies move?

(2) What games can we play?

(3) What jobs can we do with our bodies, i.e. sailor - think of the kinds of movements he makes - etc.

(these would be helpful to role play or dramatize)



(One suggestion for construction paper character to show body movements.)

BROAD OBJECTIVE: Children appreciate good health and good attitudes. Grades: K - 3

Learnings	Pupil Experiences	References
Children learn how they can have happy feelings.	Let the children look in the mirror and say, "Hi, Friend" and practice saying nice things to themselves until they really mean them. If they see something they don't like let them discuss these and try to decide what they can do about them and change them.	MP 1188 Be Happy, Be Healthy MP 1558 What to do About Upset Feelings
	Listen to the song, "These Are a Few of My Favorite Things." Take turns naming things that make them feel good. Draw pictures of our favorite things.	MP 1109 Little Engine that Could
	Tell humorous stories about oneself, (teacher, too)	
	Let student discuss ways in which their feelings were hurt. Let them discuss ways to overcome these feelings. Examples: not chosen to do something, being laughed at, or being compared with another person.	
	Dramatize a good loser and a poor loser. (Use either role play or Puppets)	
	Let children make paper masks of themselves. Let them tell about themselves: How do you look? What do you like to do? (games, work, etc.) How do you feel about yourself?	
	Dramatic play - one child is feeling unhappy; another makes him feel better.	

Grades: K - 3

THE FOLLOWING ARE STORIES, POEMS, OR PICTURES FROM THE 1969 ADOPTED READING TEXTS AS THEY APPLY TO THE SPECIFIC OBJECTIVE OUTLINED IN THIS CURRICULUM GUIDE.

BROAD OBJECTIVE: Children appreciate good health and good attitudes.

"Temperamental" Poem p. 78 (FROM FARAWAY PLACES 3^1), Harper and Row

ALL ONE STORY
("A Bad Morning" pp. 95-99 (REAL AND MAKE BELIEVE 1^1), Harper and Row
("No One Like Me" pp. 11-104
("This Will Show Them" pp. 105-111
("As Happy As a Lark" pp. 112-115

ALL ONE STORY
("I Want to Be Best" pp. 9-13 (ALL THROUGH THE YEAR 2^1), Harper and Row
("Tomorrow a Someday Soon" pp. 14-16
("I Am Counting on You" pp. 17-20
("The Big Question" pp. 21-26
("The Three Reds" pp. 27-31

"Little Jonathan" pp. 27-37 (SHINING BRIDGES 2^2), Macmillan
Jonathan was tired of being too little to do the things he wanted to do. His mother made him clothes of buckskin. He fell in a stream and they shrunk, while he was wishing he were big. He fell asleep and when he awoke he didn't realize the clothes had shrunk; he thought he had grown big. Through this he learned that it wasn't so bad being little Jonathan Brown.

"The Boy Who Couldn't Swim" pp. 94-108 (SHINING BRIDGE S 2^2), Macmillan
The story of a boy who was afraid to learn to swim and how he overcame his difficulty.

"Louis Braile" pp. 59-68 (MORE THAN WORDS 3^2), Macmillan
Overcoming physical difficulty

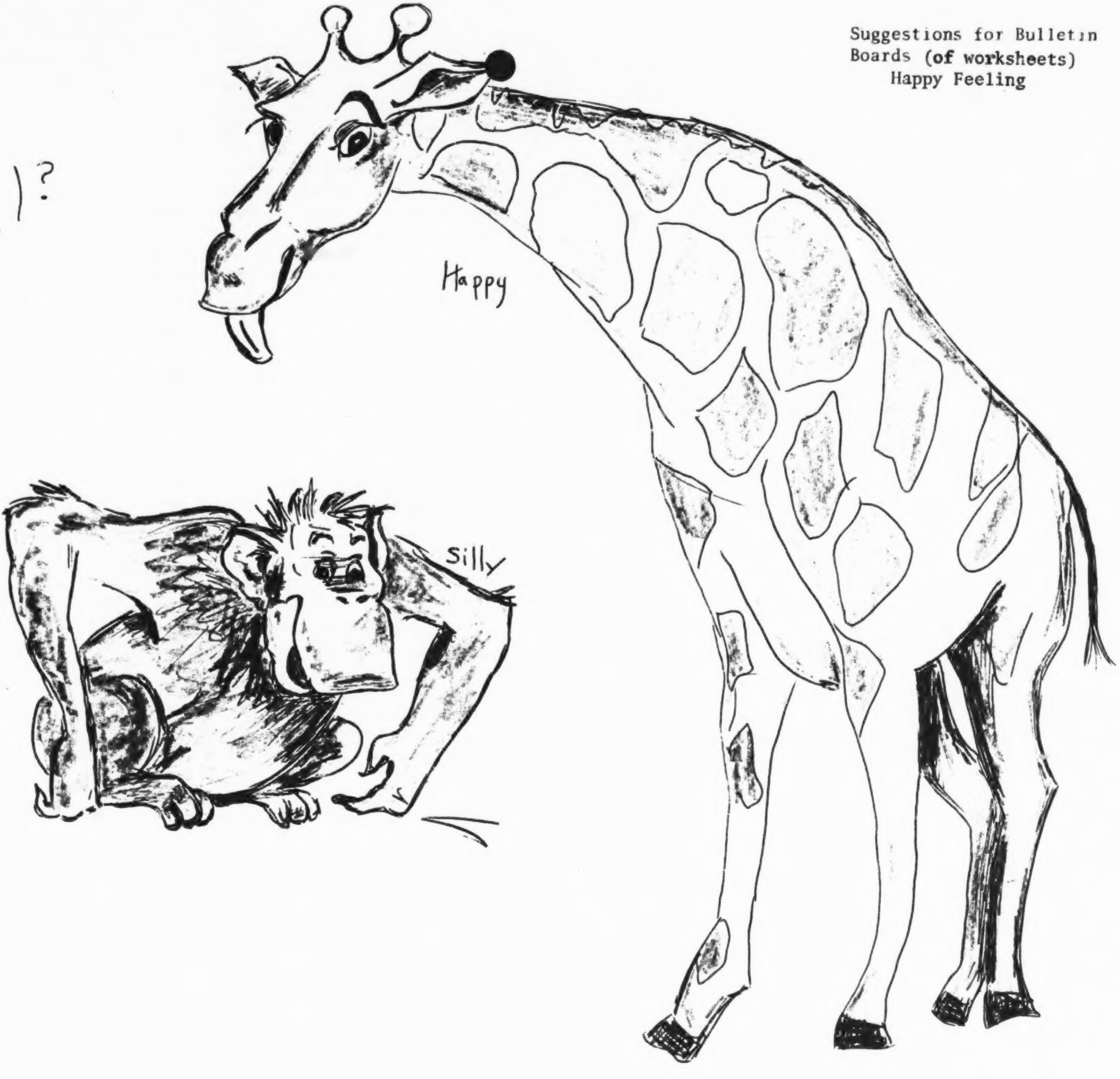
How

Do

Suggestions for Bulletin
Boards (of worksheets)
Happy Feeling

You

Feel?



BROAD OBJECTIVE: Children recognize ways to stay healthy.

Grades: K - 3

Learnings	Pupil Experiences	References
Children learn how to stay healthy by using good health habits: rest, eating, exercise, and cleanliness.	Make sure the children wash their hands before lunch. Discuss reasons why.	MP 1453 Care of the Skin
CLEANLINESS	Let the children make a class scrapbook of good grooming practices.	FS 1811 Keeping Clean FS 1812 Keeping Clean
	Let the children make a list of reasons why cleanliness is important to staying healthy. Use role play to illustrate some of these reasons.	MP 1648 Running for Sheriff (Cowboy Careful wins over Kid Careless)
	Discuss and find pictures of mother cats washing kittens, or demonstrate with family of kittens.	
	Let the children make pictures of good health habits.	
	Make up a flannel board story to show effect of germs on our bodies (see reverse side)	
REST	Discuss how rest is important to the body. Have the children give examples of times when they were overtired and what happened.	FS 2274 Rest and Sleep MP 1836 Sleep for Health
	Puppets could be used to dramatize all of these health habits.	
	Discuss how animals rest after hard play and vigorous activities.	
	What happens inside us when we rest. 1. Muscles relax - blood soothes them and makes them strong and ready to use again. 2. Blood has a chance to repair tissue - cuts, bruises, etc. 3. When your body is relaxed it assimilates the food you have eaten and begins to grow	

BROAD OBJECTIVE: Children recognize ways to stay healthy.

Grades: K - 3

Learnings	Pupil Experiences	References
Children learn how to stay healthy by using good health habits: rest, eating, exercise, and cleanliness.	Let the children report all the exercise they get in one day.	MP 1893 Fitness Skills for Children - Move Better
	Have them discuss why exercise is importand to a healthy body.	MP 1894 Fitness Skills for Children - Play Better
EXERCISE	Let the children act out (role play or puppet) what happens if they don't get proper exercise.	MP 1895 Fitness Skills for. Children - Walk Better
	Have them discuss why they have jogging and other games at Game Time.	
	Ask the children to stretch every muscle in their bodies. Begin with head. Then try to touch elbows behind back. Then trunk rotation. Stretch fingers by rotating hands and flexing fingers. Touch toes. Make small circle with arms. Raise leg for 10 seconds, etc. Muscles in tone keep your circulation up and hold you up properly to allow your organs to work.	

BROAD OBJECTIVE: Children recognize ways to stay healthy. Grades: K - 3

Learnings	Pupil Experiences	References
Children learn how to stay healthy by using good health habits: rest, eating, exercise and cleanliness.	Have children watch TV commercials and understand what they are for. Focus on commercials related to food.	MP 1876 Alexander Learns Good Health (Cartoon used to stress general health habits: diet, cleanliness, rest, and exercise.
EATING	Let children dramatize a commercial they have seen (role play or puppet).	MP 1338 Eat Well Grow Well
	Make a list of products related to health which are advertised on TV.	MP 1964 I Feel Great
	Cut and paste the basic four food types 1) Milk Products 2) Cereal and Wheat Products 3) Vegetable and Fruit Products 4) Meat Products	FS 1145 Food for Good Health FS 1521 Foods for Health
	Have the students draw a picture of a good breakfast, lunch, or dinner they would like to have.	FS-Our Trip to a Dairy Farm We All Like Milk (photos) Child Feeding (posters, Calif. Dairy Council)
	Play the flannel board game, "What's Missing?"	Good Food Gives You Grow Power, American Red Cross
	Let the children make pictures or posters of good health habits.	Shield of Good Health (a color wall chart of the essential four food groups) Wheat Flour Institute
	Children could write a class story (perhaps using animals instead of children) to illustrate good and bad health habits (perhaps using contrasting characters).	A Basic Breakfast Pattern (colorful wall chart), Cereal Institute, Inc.
	Store. Ask the children to bring in empty packages, cans of food. Then have them come to the store to buy the makings for a balanced meal.	What Will I Be..From A to Z (Booklet and student checklist) Every Day..Eat the 1-2-3-4 Way (Poster and student folder), Dairy Council of California

Grades: K - 3

THE FOLLOWING ARE STORIES, POEMS, OR PICTURES FROM THE 1969 ADOPTED READING TEXTS AS THEY APPLY TO THE SPECIFIC OBJECTIVE OUTLINES IN THIS CURRICULUM GUIDE.

BROAD OBJECTIVE: Children recognize ways to stay healthy.

CLEANLINESS

"Mrs. Goose's Bath" pp. 127-134 (STAR BRIGHT 2), D. C. Heath & Co.
Fun ! Mrs. Goose decided to take a bath. She heated the water, climbed into the tub--something was wrong. She had forgotten to put the water in the tub. (Silly Fun)

"Some Mother" pp. 68-73 (MY CITY 2^1), Macmillan
Helen, Ben's sister, takes care of him for a time. She makes sure everything is clean--too clean.

REST

"The Critic" Poem p. 38 (SOUNDS OF LAUGHTER 2) Bill Martin, Jr.
"Good Night" Poem p. 39 (SOUNDS OF LAUGHTER 2) Bill Martin, Jr.

EXERCISE

"Up and Down" pp. 17-20 (JANET AND MARK, PP), Harper and Row
"Jump In" pp. 29-32 (JANET AND MARK, PP), Harper and Row
"One, Two, Three" pp. 33-36 (JANET AND MARK, PP), Harper and Row

EATING

"Good Hamburger" pp. 33-38 (OUTDOORS AND IN PP^2), Harper and Row

Picture for Storytelling, pp. 146-147 (SOUNDS OF THE STORYTELLER 3), Bill Martin, Jr.
Little boy gathering eggs -- Mother packing and weighing eggs.

"The Big Cheese" pp. 178-201 (SOUNDS OF THE STORYTELLER 3), Bill Martin, Jr.
About a farmer who made a big cheese and wanted to present it to the king.

"Social Studies - Norway" p. 139 (FROM BICYCLES TO BOOMERANGS 3^2), Harper and Row
What the children in Norway eat for breakfast.

"Linda's Lunch" pp. 163-169 (UPTOWN, DOWNTOWN), Macmillan
About a field trip to the City Museum. Linda forgot her lunch but when everyone shared theirs she had the biggest of all.

THE FOLLOWING ARE STORIES, POEMS, OR PICTURES FROM THE 1969 ADOPTED READING TEXTS AS THEY APPLY TO THE SPECIFIC OBJECTIVE OUTLINED IN THIS CURRICULUM GUIDE.

Grades: K - 3

BROAD OBJECTIVE: Children recognize ways to stay healthy.

EATING (continued)

"Smarty Arty Finds Out" pp. 104-109 (MY CITY 2^1), Macmillan
Arty is a boy who lived in the city, who thought he knew everything. On a visit to the country he learns that milk is from cows, apples from trees, and eggs from chickens. And he learns that he doesn't know everything.

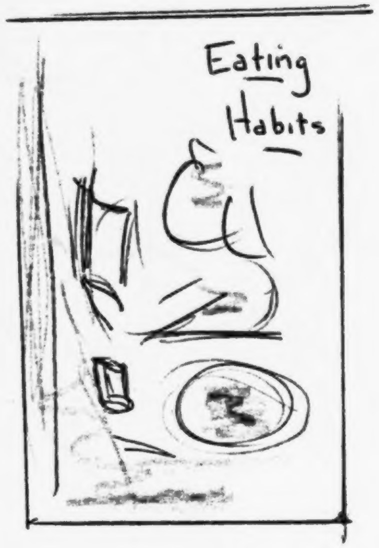
"What Came Next?" pp. 153-154 (GREEN LIGHT, GO 2^2), Macmillan
Pete is hungry and makes himself a gigantic cheese-chicken-egg-tomato-bean sandwich. After he had eaten it, the doctor must make an emergency visit. *Note: This story could also be used when talking about the doctor and how he helps us.

"The Nine Thousand Egg Lunch" pp.166-169 (GREEN LIGHT,GO 2^2),Macmillan
Mrs. March cooks for schools all over the city.

"The Chili Surprise" pp. 17-23 (CITY SIDEWALKS 3^1), Macmillan
Because of a supermarket mixup a family with a favorite Sunday dinner consisting of typical American staples finds itself with an unexpected supply of Mexican food.

"The First Bread" pp. 222-227 (CITY SIDEWALKS 3^1), Macmillan
The history of bread making.

Bulletin Board
Idea
(or Worksheets)



SOAP

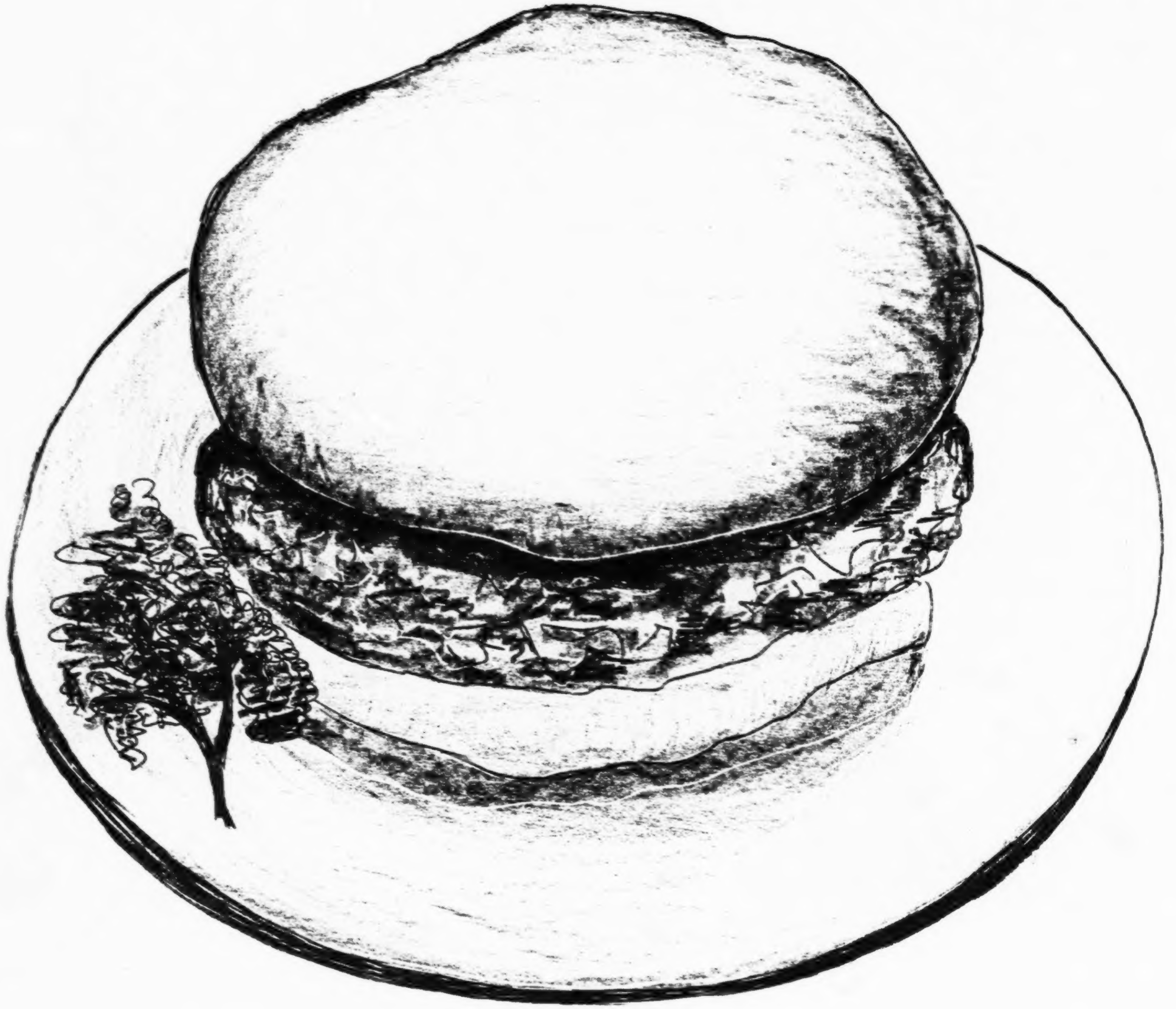
Rest

Exercise

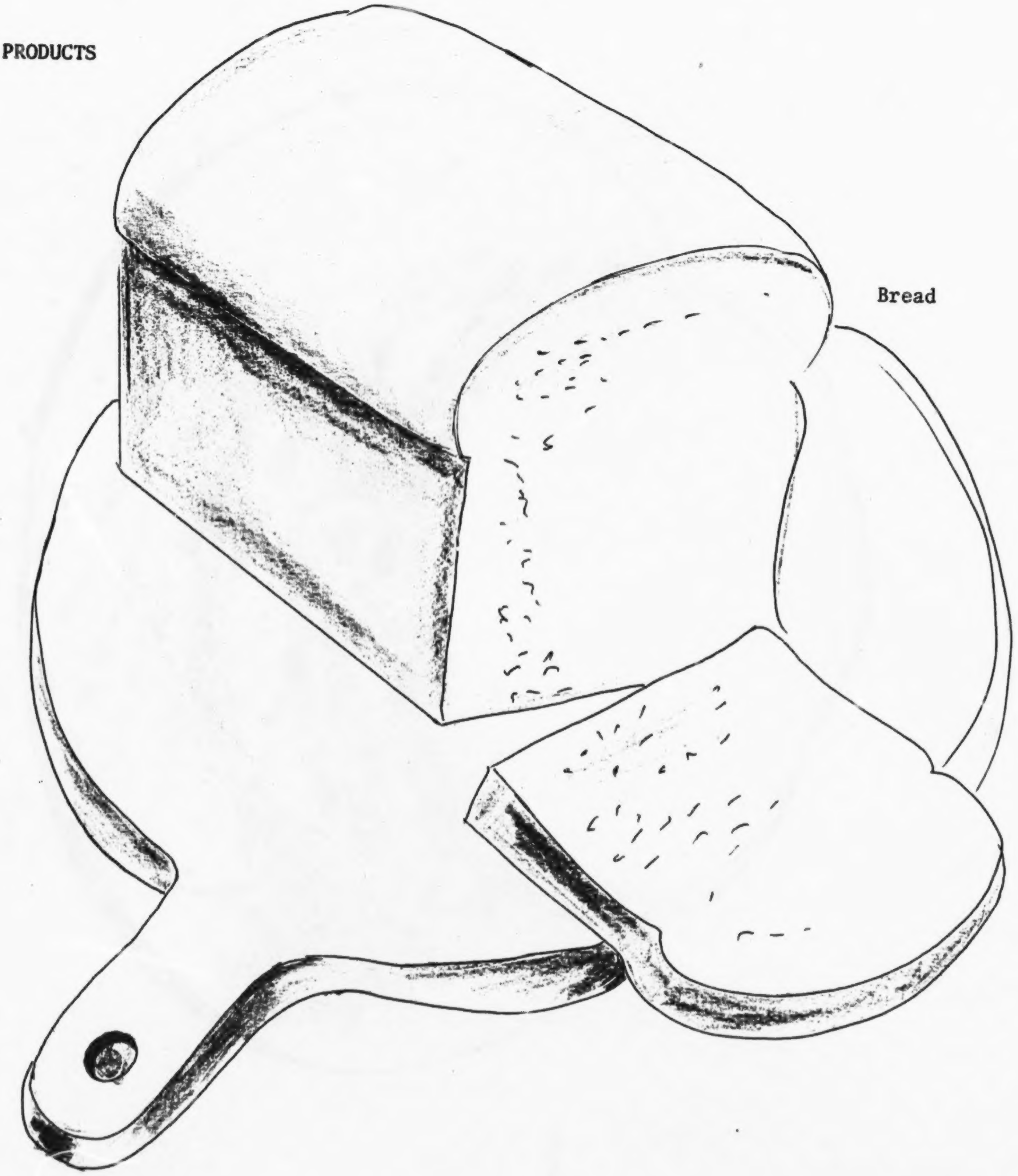
Eating Habits
Good Food Habits

MEAT

Hamburger



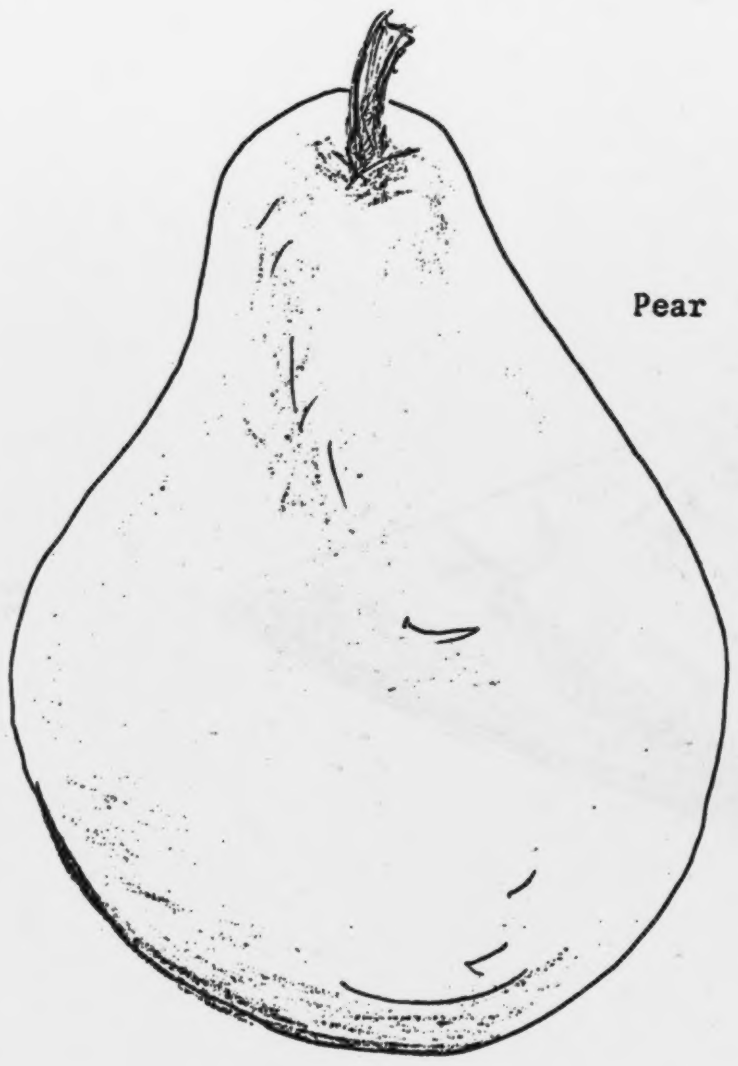
WHEAT PRODUCTS



MILK PRODUCTS

Ice Cream

FRUITS AND VEGETABLES



Pear

Tomato

BROAD OBJECTIVE: Children know what to do and who will help them when they are sick.

Grades: K - 3

Learnings	Pupil Experiences	References
Children learn how their parents help them when they are sick.	Let the children draw a picture of an experience when they were sick and their parents helped them. Include: 1) what happened to them 2) what the parents did to help 3) what medicine (if any) was used Discuss these.	FS 1372 Doctor FS 2932 The Doctor FS 2104 Our Health Department
Children learn how their doctor and others help them when they are sick.	Dramatize a doctor's visit: what was wrong with them and what the doctor did to help; also how did the doctor and nurse act.	MP 1102 A Community Keeps Healthy
	Write an experience story about a visit to the nurse or doctor.	
	Invite a parent or friend who is a doctor to visit the class to discuss how he helps people.	
	Let the children make a list of community helpers who protect health and the contributions they make to guard our health, such as: doctors, dentists, city health dept. employees, volunteer workers like the Red Cross, the school nurse, and even the secretaries in the office (when nurse isn't available).	
	Good readers could make reports from encyclopedias or biographies of famous doctors in the past who have helped us. These could be given orally.	
	Invite the school nurse. She can tell them the kind of work she does and what other nurses do. Children should be encouraged to ask questions.	

Grades: K - 3

THE FOLLOWING ARE STORIES, POEMS, OR PICTURES FROM THE 1969 ADOPTED READING TEXTS AS THEY APPLY TO THE SPECIFIC OBJECTIVE OUTLINED IN THIS CURRICULUM GUIDE.

BROAD OBJECTIVE: Children know what to do and who will help them when they are sick.

"Give to the Red Cross" pp. 147-157 (AROUND THE CORNER p^1), Harper and Row
Children wish to give to the Red Cross so they plan a Red Cross Show to raise money.

Excellent Picture for Storytelling pp. 44-45 (SOUNDS OF THE STORYTELLER 3), Bill Martin, Jr.
A humorous picture showing a doctor examining a cow's mouth.

ONE STORY

("The Goat Story" pp. 113-120 (WORLDS OF WONDER P) Macmillan
(Billy is a little goat on a farm. He wouldn't eat, run, jump or play.
("The Doctor" p. 121 (WORLDS OF WONDER P) Macmillan
(The doctor gave Billy, the goat, a shot. Billy got well. Then he ate,
(ran, jumped, and played.
(*Note: This could also be read when talking about the objective -
(Medicines Help
(Story could also be related to the central character being a child in
(the classroom.

Who Helps Us When We're Sick?

Mother

Nurse

Doctor

BROAD OBJECTIVE: Children recognize what medicine is for and how it is to be used.

GRADES: K-3

Learnings	Pupil Experiences	References
Children learn how medicine will make them well if taken correctly.	Make a display of common household medicines. Let children choose one they have taken or seen taken and tell what it is used for. Discuss: 1) Who should take medicine 2) Who should decide when medicine is necessary 3) How much medicine should be taken Younger children would enjoy being the parents and helping their "children" get better. Older children might enjoy writing and acting out a play or puppet show about the proper use of medicines.	FS 2756 Little Elephant Catches Cold FS 1814 Keeping Sickness Away Goodbye Germs (poster), American Red Cross FS 2158 Pesky, the Cold Bug Polio (posters), The National Foundation Have a Happy Measle, Bendich, Jeanne MP 5029 Defense Against Invasion
Where does medicine come from?	Discuss the fact that some medicine is made and some is grown. Some of the plants we see growing around us are poisonous. Some are good for us.	

Open Wide!

BROAD OBJECTIVE: Children recognize what medicine is for and that it should be taken correctly.

Grades: K - 3

Learnings	Pupil Experiences	References
Children learn that medicine will make them well if taken correctly.	Pupils will enjoy relating personal experiences telling a time when they were sick and what was done to help them.	"Be a Reader in Science," pp. 73-110. Includes: Study of Microbes. Early Scientist and what they discovered. Microbes that are harmful. Microbes that are useful medicine (penicillin)
	Discuss vaccinations; what they are for, etc.	
Go back to germ living in tummy (a la TV)	Pictures can be drawn of these experiences.	
medicine makes him (germ) die	Stories could be written about these experiences. They might enjoy changing the subject from themselves to an animal. Or perhaps they would like to write a story about one of their pets that was sick and what the family and doctor did (perhaps medicine was given) to make the animal well.	FROM BICYCLES TO BOOMERANGS 3^2, Harper and Row.
	Children enjoy telling Picture Stories (Collect these). Attention should be given to sequence and language development, i. e., What is happening in the first picture? What is wrong with Billy? What is Mother doing? What is happening in the second picture? How is Mother helping Billy? How do you think Billy feels?	
Stomach is no germ - medicine hurts stomach - makes you dizzy etc.	It is important to bring out through discussion: 1) Who should give the medicine 2) How much should be taken and how often 3) Where medicine should be kept when not being used	
	Puppets or role play for dramatization would also be good to use.	
	Make a display of various household medicines: discuss use and storage.	

BROAD OBJECTIVE: Children recognize what medicine is for and that it should be taken correctly.

Grades: K - 3

Learnings	Pupil Experiences	References
Children learn that medicine can be harmful if not taken correctly.	Discuss the use of medicine. Medicine is not candy. What can happen if the wrong medicine is given. What can happen if the wrong amount of medicine is given. Role play would be useful here. Pose situations and discuss with children. 1) Pinkie, the dog, was walking to school and he found some pills and ate them 2) The kitty ate too many pills	

MR. DIRT GERM

-------Punching stomach to make it hurt.

Decides to live here - and -

(infection) brings in his friends)

What Are Medicines For?

BROAD OBJECTIVE: Children recognize other household substances which can be harmful to their bodies.

Grades: K - 3

Learnings	Pupil Experiences	References
Children learn what household substances are harmful to their bodies and where these substances should be kept.	Make a display of common household substances which are or could be harmful to the body. Let the children suggest others.	
	Discuss these. Talk about their importance and use and why they are kept in the house or around the house. Discuss where these various things should be stored.	
	Let the children go home and ask their parents where some of these are stored in their homes. Have them discuss with their parents good or better places of storage.	
	Let the children draw pictures of good storage places for these substances which they found in their homes.	
	Let the children share some of these with the rest of the class.	
	Use a picture showing a little boy or girl standing on a chair and getting into the medicine cabinet.	

Keep in a Safe Place (Out of Reach)

BROAD OBJECTIVE: Children realize they can help protect others in their family or friends by using safety measures.

Grades: K - 3

Learnings	Pupil Experiences	References
Children learn how they can help protect others and what to do in an emergency.	Have the children discuss how they can help other children in their family know how to use medicine properly and stay away from other harmful substances.	FS 1140 Home Safety FS 1664 Home Safety
	Role play and puppets could be used to dramatize these suggestions.	MP 1911 How to Have an Accident in the Home (Donald Duck demonstrates ways accidents happen in the home)
	Discuss with the children emergency measures they should know about if a younger sibling takes pills or swallows something dangerous. 1) Call Mother or Father 2) Know how to dial the Doctor, Fire Dept., or Police if parents or other adults are not present. (Use telephones to act out these procedures) 3) Learn how to put on a band-aid and use the first-aid kit in the room. 4) Role play, using the doctor's kit, a situation where a child has taken pills accidentally.	MP 1233 Let's be Safe at Home FS 2299 Safe and Sound at Home (Dramatizes safety rules to observe around home)
	Discuss communicable diseases and how they can prevent others from getting their germs. Older children could make posters or pictures showing how to protect our friends against diseases we may have.	"Chicken Pox & Mumps" pp. 52-56 (GREEN LIGHT, GO 2^2), Macmillan While Charlie has chicken pox, the girl in the next apartment has mumps. Curiosity prevails. They meet in the hall. Two weeks later, of course, Charlie has mumps; Mary has chicken pox.

Motion Pictures (Available from San Diego County Department of Education)

Catalog Number	Title, Grade Level, and Description
MP 1102	A COMMUNITY KEEPS HEALTHY (Primary and Intermediate) Discusses what is necessary in order to make a community healthy. Shows the community health department inspectors who visit dairies and markets, the city workers who clean streets, and water department workers who keep water pure.
MP 1876AL	ALEXANDER LEARNS GOOD HEALTH (Primary) A general health habit film stressing diet, cleanliness, rest and exercise. An interesting cartoon and cut paper technique is used to tell the story Alexander and his dream.
MP 1188	BE HAPPY, BE HEALTHY (Primary) Develops an awareness of correct health habits by creating an identification between children and a group of cartoon characters who personify poor health habits--Dowdy Duck, Picky Puss, Musty Mole, Noddy Owl, and Sneezy Weesel.
MP 1453	CARE OF THE SKIN (Primary) Demonstrates the good habits of skin hygiene which every child should form. Animated drawings describe the structure of the skin and explain why soap is necessary for cleanliness.
MP 1338	EAT WELL, GROW WELL (Primary) At a circus performer's magic show on good health, Alan learns that he gets tired quickly and catches cold easily because he has poor eating habits. Presents the four food groups and emphasizes eating the right foods.
MP 1893	FITNESS SKILLS FOR CHILDREN - MOVE BETTER (Primary and Intermediate) Demonstrates basic skills in running, leaping, and high jumping. Lean of the body, pull of the arms in opposition to the feet and the like are clearly shown by use of a slow motion camera.
MP 1893	FITNESS SKILLS FOR CHILDREN - PLAY BETTER (Primary and Intermediate) In a playground situation skills of throwing and catching a ball, walking, and running are shown. Footwork and the use of the arms and hands in playing with a ball are detailed.

Motion Pictures (Available from San Diego County Department of Education) Continued

Catalog Number	Title, Grade Level, and Description
MP 1895	FITNESS SKILLS FOR CHILDREN - WALK BETTER (Primary and Intermediate) Correct and incorrect walking habits are shown and analyzed. Use of proper shoes and exercise in walking are also shown. Useful in motivating a fitness program.
MP 2043	GROWING UP DAY BY DAY (Primary and Intermediate) Growth and development and normal variations among young children, and factors necessary for good health.
MP 1911	HOW TO HAVE AN ACCIDENT IN THE HOME (Primary) Features Donald Duck as he demonstrates many ways accidents happen in the home. Useful to start discussion. Emphasizes that average intelligence and care should prevent 5,000,000 annual home accidents.
MP 1964	I FEEL GREAT (Primary) Depicts a cartoon of young farm animals that conspire with Mrs. Cow to teach Whaffor that milk is marvelous and makes animals and little boys feel great.
MP 1223	LET'S BE SAFE AT HOME (Primary) Presents five situations showing how to avoid common accidents at home and discusses these situations in terms of alertness, carefulness, courtesy, consideration for others, and refraining from "showing off."
MP 1109	LITTLE ENGINE THAT COULD (Primary) Based on the children's classic which tells of the Little Engine that pulled a trainload of toys to the children on the other side of the mountain. The film teaches us that there are many things we can do if we only say, "I think I can."

Motion Pictures (Available from San Diego County Department of Education) Continued

Catalog Number	Title, Grade Level, and Description
MP 1648	RUNNING FOR SHERIFF (Primary) Depicts the foot race for sheriff in a storybook cowboy town in which Cowboy Careful wins over Kid Careless because he has a good night's sleep and a good breakfast, and besides he is always helpful and considerate, while Kid Careless is sloppy and selfish.
MP 1836	SLEEP FOR HEALTH (Primary and Intermediate) Contrasts good and bad sleeping habits of David and George. Special emphasis is placed on forming good habits and their importance to our health and general feeling of well-being.
MP 1558	WHAT TO DO ABOUT UPSET FEELINGS (Primary) Presents three situations in which children learn to cope in different ways with their upset feelings. They learn to be aware of three factors: know what you're angry at and why, do something to help yourself, and accept your responsibilities.

Filmstrips (Available from San Diego County Department of Education)

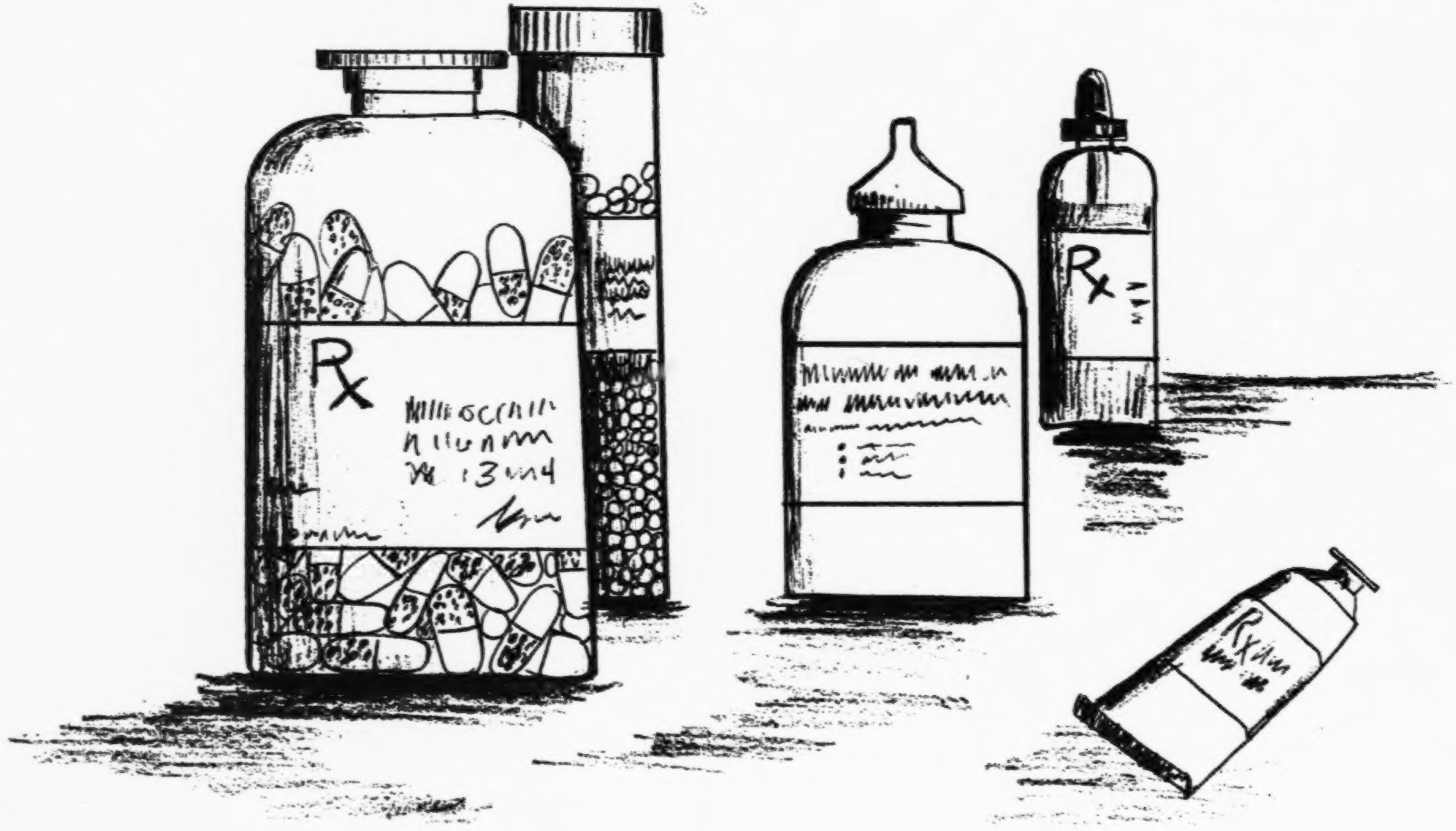
Catalog Number	Title, Grade Level, and Description
FS 1372	DOCTOR (Primary) David gets an exam before starting school. Shows how druggists and health officers assist.
FS 1145	FOOD FOR GOOD HEALTH (Primary and Intermediate) Shows why food is important, how plants and animals get their food, and the (five?) food groups we need.
FS 1521	FOODS FOR HEALTH (Primary) Jim and Jane, visiting their grandparents' farm, describe food they eat and what they do.
FS 1140	HOME SAFETY (Primary) Safety rules for children in their homes.
FS 1664	HOME SAFETY (Primary) Safety practices in kitchen, bathroom, and others, and accident care.
FS 1811	KEEPING CLEAN (Primary) Shows Jim and Jane washing hands and face, brushing teeth, taking baths, and brushing hair.
FS 1812	KEEPING CLEAN (Primary) Stresses washing before meals, cleaning fingernails, and taking a nightly bath.
FS 1814	KEEPING SICKNESS AWAY (Primary) Discusses cleanliness, proper rest, vaccination, and proper food.

Filmstrips (Available from San Diego County Department of Education)

Catalog Number	Title, Grade Level, and Description
FS 2756	LITTLE ELEPHANT CATCHES COLD (Primary) Little elephant has same treatment for his cold as a child. From book by H. Washburne. (Little Elephant)
FS 2104	OUR HEALTH DEPARTMENT (Primary) Shows how Health Department keeps people healthy and what it does when they are sick.
FS 2158	PESKY, THE COLD BUG (Primary) Indicates ways of spreading a cold. Rules for taking care of a cold are given and the cold "bug" is killed.
FS 2274	REST AND SLEEP (Primary) Shows why growing children need plenty of rest and sleep.
FS 2299	SAFE AND SOUND AT HOME (Primary) Dramatizes safety rules to observe around home. Asks students to tell safety stories.
FS 2932	THE DOCTOR (Primary) Terry's class discusses ways to help the doctor keep them well.
FS 2626	WE GROW (Primary) Johnny learns that he was once very little but gradually grew, learned to eat, and walk. (Growing Things)

DRUG ABUSE EDUCATION

PRELIMINARY GUIDE FOR GRADES 4-6



South Bay Union School District • Imperial Beach • California

SOUTH BAY UNION SCHOOL DISTRICT

DRUG ABUSE EDUCATION

A Drug Abuse Education Unit for Grades Four, Five and Six

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DR. ROBERT N. BURRESS
Superintendent

Published by
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Imperial Beach, California
92032

January 1969

FOREWORD

In the South Bay District we are vitally concerned with helping our children develop knowledge and attitudes that will enable them to handle the drug problem when they are confronted with it. We conducted a pilot program at three grade levels during the 1967-68 school year. As a result of that experience and our continuing concern in the area of health and social awareness we have prepared this publication to help our teachers work with children.

We are committed to a positive approach of teaching an attitude toward care of the body and pride in oneself that will give our children some background to meet the decisions they will have to make as they grow older. We also plan to teach them basic facts about drugs and other injurious substances that will help reinforce these positive attitudes. This program has the wholehearted support of our Board of Trustees and has met with good general acceptance in our community.

Dr. Robert N. Burress
District Superintendent

South Bay Union School District

601 Elm Avenue

Imperial Beach, California 92032

ACKNOWLEDGMENTS

The South Bay Union School District wishes to acknowledge and thank members of the Board of Trustees who gave their approval to proceed with a pilot study in Drug Abuse Education; and the parents and teachers for their participation in piloting this study. We wish also to give special credit to Peter R. Frank, Curriculum Coordinator, San Diego County Department of Education, and Dr. Angela Kitzinger, Professor of Health Education, Consultant in School Health Education, California State Department of Education, who gave many dedicated hours as consultants and provided encouragement. Teachers who participated in the pilot study in Drug Abuse Education were allowed to be creative, and a number of their ideas are incorporated into this guide.

Pilot Study - DRUG ABUSE EDUCATION

Participating Teachers

Beaky, Antoinette
Hammons, Susan
Hatcher, Barbara
McCauley, Elizabeth
Pasco, Polly
Schattenstein, Richard
Schramm, Maxwell
Strawhun, Frances
Vogt, Susan
Wolf, Alan

Advisors to the Study were:

Frank, Peter R.
Hatch, Clifford L.
Kitzinger, Angela
Mc Cormick, Betty G.

This Unit was developed by:

Pagard, Mona

Permission to reproduce and incorporate "About Drugs" was given by authors Les Landin, Vice Principal, Redwood School, Saratoga, California, and Haskell Bowen, former Director of Drug Abuse Education Santa Clara County Public Schools.

It seems unhelpful to perpetuate our refusal to take them seriously in the consideration of this flood of social issues which affect us all and their future most directly.

Perhaps our deepest concern at this time should be to help our young people develop effective concepts about themselves and positive feelings about our society rather than devising more elaborate and repressive outside controls on their behavior which we can neither justify or enforce.

Clifford L. Hatch
Director of Guidance Services

INTRODUCTION

We live in a drug oriented society, where children are saturated with the wonders of drugs from the time they are first able to see television commercials on aspirin and geritol. Children accept drugs as a necessary part of society. The problem arises when they have to differentiate between the legal and the illegal. How are we to explain the difference between the drugs the doctors prescribe for them and the drugs that are used for illegal purposes? How do we explain the drugs accepted by their parents and the drugs they learn about in school? The teacher's role is one of prevention, familiarizing pupils, making them aware and to build a base in human values. We cannot and must not use fear tactics. Research indicates that police tactics and negative attitudes are not effective. Children's attitudes are not changed by these methods. Neither must we dwell on hard narcotics, but especially at the elementary school level, we must approach drug abuse problems from a positive viewpoint. The secret is THE HOW, THE WHY, AND WITH WHAT ATTITUDES do you present Drug Abuse Education.

The key is one of building proper attitudes, teaching decision making, working from the concept and appreciation of the human body. Basic to developing attitudes and appreciation is how do you solve your problems, what do I have with which to meet life?

Citizenship needs to be stressed. Another of the teacher's responsibilities is to point out the relationship of drugs and being a good citizen. The basic concept of the laws being challenged is another aspect on which we must work. As citizens we need to learn respect for the law.

The problem with our age level children is not so much one of marijuana, heroin, and hard narcotics, but one of teaching values, and one of producing mentally healthy and socially adjusted children.

We are already teaching the effects of alcohol and tobacco, as required by State Law. In teaching about drug abuse as in all curriculum areas, we must avoid lecturing and moralizing. The underlying concept of the program is one of responsibility, responsibility to ourselves and to others. We must stress reason and awareness as opposed to punishment, fear and morality. Positive and negative aspects must be stressed, but not dwelled upon. These concepts are not only about drugs, but about people We want to produce behavioralistic change. Guidance of the child's emotional and social development is most important. The strongest deterrent to drug abuse in the child's future lies in his strength of character in his ability and determination to face life and enjoy it through the wholesome understanding and constructive use of his own resources.

(Mrs.) Betty G. McCormick
General Supervisor

OBJECTIVES

Drug Abuse Education as part of the total curriculum in the South Bay Union School District has the following goals:

1) To build the self concept; good attitudes towards self.
2) To give instruction in decision making to children to enable them to make decisions.
3) To develop appreciation for the human body.
4) To develop responsibility to self and to others.
5) To build good citizenship - respect for the law.
6) To promote parent involvement
    a. by creating an environment in the home where there there is a positive value orientation.
    b. by bringing enlightenment and correct information into the home ... in order to help eliminate misinformation.

STRANDS - TIME SCHEDULES

There are four strands included in the program:

1) Volatile Chemicals
2) Health and Appreciation of the Human Body
3) Advertising Propaganda
4) The Law

Time Schedules are as follows:

Kindergarten ...	Two weeks -	15 - 30 minutes daily	
Grade One	Two weeks -	15 - 30 minutes daily	
Grade Two	Two weeks -	15 - 30 minutes daily	
Grade Three	Six weeks -	30 - 45 minutes per day -	Three times per week
Grade Four	Six weeks -	30 - 45 minutes per day -	Three times per week
Grade Five	Six weeks -	60 minutes or more per day -	Three times per week
Grade Six	Six weeks -	60 minutes or more per day -	Three times per week

Length of time, daily, is dependent upon pupil interest.

DRUG ABUSE EDUCATION
Preliminary Guide

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BROAD OBJECTIVE: Children respect the worth and dignity of themselves. They take pride in their self concept; and respect for a healthy body and mind.

Grades: 4, 5, 6
Correlated Areas: Health, Art, Language Arts

Learning	Pupil Experiences	References
Children learn to accept and respect themselves(develop self-concept) the way they are as well as to decide they may want to change some things about themselves	Have children think about their strengths or assets. Ask them to think especially about how they use these strengths and how they plan to use them in later life. Ask how they got these strengths. Ask how they can develop them further or develop new, desirable strengths.	T 1348 Grouch Hunter T 1349 Hold that Temper MP 5254 How Honest are You? MP 5328 Other Fellow's Feelings
	Encourage children to discuss what they are now, what they want to be when they grow up, and what they can do now to help them achieve (and possibly exceed) their goals.	MP 5328 Understanding Your Emotions Laugh and Cry, Beim, Jerrold
	Have the children make a report or chart listing goals they have(immediate and future)and how they plan to achieve them.	MP 1591 Don't Be Afraid MP 1587 Don't Get Angry
	Illustrate with a picture sequence ways in which we can assume responsibility for our own acts.	MP 1473 Learning From Disappointments
	List reasons why criticism is needed and why it is not necessarily negative.	Health 4 - Laidlaw pp. 6-21
	List ways of making and keeping friends. Use Role play to illustrate these.	Health 5 - Laidlaw pp. 6-19, 42-52
	Have a committee prepare a bulletin board display of pictures depicting a variety of emotions such as anger, fear, love, happiness, etc. An appropriate title might be "Emotions We Live With".	Health 6 - Laidlaw pp. 6-21
	Look at pictures of people whose faces are contorted with emotion and try to guess the emotion.	

BROAD OBJECTIVE: Children respect the worth and dignity of themselves. They take pride in their self concept; and respect for a healthy body and mind.

Grades: 4, 5, 6
Correlated Areas: Health, Art, Language Arts

Learning	Pupil Experiences	References
Children learn to accept and respect themselves (develop self-concept) the way they are as well as to decide they may want to change some things about themselves.	Role play situations demanding friendliness and tact.	
	Discuss and write biographical sketches of famous persons who overcame initial failures.	
	Tell what you do about tempers, fears, and jealousy.	
	Let children begin their own or a class glossary of vocabulary used in this unit.	

BROAD OBJECTIVE: Children respect the body as a miraculous creation and a precious resource.

Grades: 4, 5, 6
Correlated Areas: Science, Health, Language Arts

Learning	Pupil Experience	References
Children become aware that the body is a miraculous creation.	Let the pupils discuss some miracles in creation, butterfly-caterpillar, photosynthesis, seasons, apparently dead seeds sprouting, etc.	Wonders of the Human Body, Part 1 Ravielli, Anthony
	Ask pupils what particular aspects of our bodies are miraculous in creation. Write suggestions on the chalkboard and discuss.	All About the Human Body Glemser, Bernard MP 6245 About the Human Body
	Have each child write a page, "My Body, a Miraculous Creation."	MP 5584 Human Machine
	Share some of these with the class.	The How and Why of the Human Body, Keen, Martin
Children respect their bodies as precious resources	Let the pupils discuss and list important functions their bodies can perform. Discuss.	MP 1809 Learning About our Bodies
	Have the pupils draw cartoon strips of stick figures showing: (perhaps divide into groups) 1) various body positions (structural) 2) various body functions 3) various jobs the body can perform 4) various games the body can perform	
	Project pictures showing the beauty and complexity of the human body. Discuss	
	Let the children discuss the inter-relationships of the various parts of the body.	

BROAD OBJECTIVE: Children understand the importance of protecting and maintaining good health for themselves and for society.

Grades: 4, 5, 6
Correlated Areas: Health
Social Studies

Learnings	Pupil Experiences	References
Children learn that maintaining good health is a responsibility to others and to the community.	Let the children discuss how their health effects the lives of those around them and also the community.	Health 5 - Laidlaw pp. 30-36; 69, 194-197 215-217
	Obtain some maps of the community. Let the children trace how many homes would be effected and how far reaching a simple illness (cold, flu) of theirs could spread if they come to school and spread the disease.	How UNICEF Saves Children, Breetveld, Jim MP 1372 U.S. Defense Against Foriegn Plague
	Have students determine what agencies in the community directly or indirectly work to control contagious diseases.	MP 1102 A Community Keeps Healthy MP 6006 Health in Our Community
	Visit: San Diego Dept. of Public Health 1600 Pacific Highway, 239-7711, Ext. 376	FS 1298 Communicable Diseases
	Various water filtration, reclamation or storage facilities.	FS 1283 Community Sanitation
	Water Purification. San Diego Saline Water Test Facility	FS 1943 Maintaining Community Health
	List ways individual members of the community (themselves especially) may cooperate in helping to maintain health.	Health 6 - Laidlaw pp. 130-145
	Invite the local health officer to speak to the class	Health 4 - Laidlaw pp. 171, 176-177
	Discuss the work of one of the voluntary health agencies and how individuals can support the program.	
	Suggest that the class watch for scheduled TV shows about these services. Discuss these, their meaning and purpose.	

BROAD OBJECTIVE: Children understand the importance of protecting and maintaining good health for themselves and for society.

GRADES 4, 5, 6
Correlated Areas: Health, Art, Language Arts

Learnings	Pupils Experiences	References
Children learn that maintaining their health is a responsibility to themselves	Let the children discuss why it is important for them to maintain good health. List these reasons on the chalkboard: 1) So I can think better 2) So I can work better 3) So I can play better 4) So I can enjoy life more fully 5) So I can live longer 6) So my children will be stronger 7) So people around me will be able to stay healthier (These are sample suggestions from children)	Have a Happy Measle, Bendick, Jeanne Common Sense about Common Diseases, The Equitable Life Assurance Society of US MP 1282 The Common Cold MP How to Catch a Cold, I Promise Common Sense (sheet), Kimberly-Clark Corp.
	Discuss the following areas and relate them to the above suggestions: Proper Rest Balanced Meals Dental Health Cleanliness Safety Rules Prevent Infections and diseases	
	Let children role play instances where the above areas performed carelessly can injure their health.	
	Make posters of Good Health Tactics	
	Write a class guide for maintaining good health - committees may write on different areas, using illustrations, and compile a class booklet.	

BROAD OBJECTIVE: Children understand that every substance taken into the body by any means enters into the complex functions of the body and effects its condition.

Grades: 4, 5, 6
Correlated Areas: Health, Art

Learnings	Pupil Experiences	References
Children learn that a substance taken into the body by eating effects its condition.		The Great Nutrition Puzzle Callahan, Dorothy and Alma Smith Payne
	Let the children make a wheel chart of the four basic food groups. Have pupils add specific substances to each of the groups: 1) The Milk Group 2) The Meat Group 3) The Fruit and Vegetable Group 4) The Bread and Cereals Group Use flannel board cutouts to show a variety of the basic foods in planning well-balanced meals.	Health 4 - Laidlaw pp. 118-133 Health 5 - Laidlaw pp. 106-121 Health 6 - Laidlaw pp. 58-109 Nutrition and Health (charts), General Mills
	Study cafeteria menus. Try to find out which of the basic food groups are included in each day's lunch.	Science Notebook - "All About Growth," a booklet which includes experiments relating to nutrition, Continental Baking Co.
	Compare alcohol, water, milk, and fruit juices as to food value.	How Your Body Uses Food (booklet Dairy Council of California
	View Filmstrip and Discuss "Your Food and Digestion". From this, use charts (children could make charts) of the digestive process to trace food as it enters the blood stream or leaves the body.	FS 3315 Your Food and Digestion MP 5245 Human Body: Nutrition and Metabolism
		MP 1098 Digestion in Our Bodies
		FS 1612 Food in the Body (A)
		FS 1613 Food in the Body (B)

BROAD OBJECTIVE: Children understand that every substance taken into the body by any means enters the Circulatory System.

Grades: 4, 5, 6
Correlated Areas: Health, Art, Language Arts

Learning	Pupil Experiences	References
Children become aware of the importance and function of the Circulatory System and how it sustains all life in the body.	Let the children discuss how the blood is traced through the body, where does it go, how its used by the body, etc. Make a list of the answers, these answers need not be accurate.	Drawings of Heart & Circulation Respiratory System. (Available: Nat'l. Assoc. Tuberculosis, San Diego County Dept. of Public Health & Amer. Heart Assoc.
	Let the pupils decide what they would like to find out about the blood and its functions in the body.	Slides: "Circulatory System" "Your Heart'How It Works" (American Heart Assoc.)
	Have the children decide what specific questions they would like to do research on. (They might do biographical sketches on early scientists and their studies of Circ. Sys. View filmstrip, Circulatory System.)	Pamphlets: "About Your Heart and Blood Stream" "The Heart'Perpetual Motion Pump" (American Heart Assoc.) Story of Your Blood Weart, Edith L.
	Have the children trace system on wall chart. Use the model heart to show how the blood flows through the heart.	Secrets of the Heart and Blood White, Anne T.
	Have the pupils write a brief page report explaining the circulatory system and its importance to the human body.	MP 2034 Circulation - Why & How FS 1234 Model Heart 5" X 9"
	Let the children give reports orally on the research they have done.	A Living Pump (chart) 50 copies National Heart Institute
	Some children may wish to draw charts of the Circulatory System.	The Story of Blood (booklet) American National Red Cross

BROAD OBJECTIVE: Children understand that every substance taken into the body by any means enters into the complex functions of the body and effects its condition.

Grades: 4, 5,6
Correlated Areas: Health, Language Arts, Social Studies

Learnings	Pupil Experiences	References
Children learn that a substance taken into the body by injection effects its condition	Poll the class to find out what vaccinations the students have had. (Many of the children from Navy families have traveled abroad and have had many different types of injections)	Health 6 - Laidlaw Chapters 7,8, 9 Concepts in Science Book 6 Unit 3, pp. 11-104, 104-108 124-130, 130-135
	Discuss the various types of vaccinations and their corresponding illnesses.	The Story of Microbes, Schatz, Albert & Riedman
	Let children make reports orally on some of these reference papers.	The First Book of Microbes Lewis, L.Z.
	Let the pupils do reference work on some of these diseases, the invention or discovery of vaccine, and how the vaccine combats the disease.	MP 5299 World of Little Things FS 1107 Bacteria-Good and Bad
	Some children may wish to do biographies on different scientists and their work on various vaccines, ie. Salk, Pasteur etc.	MP 5029 Defense Against Invasion
	Use diagrams of the blood stream and trace the vaccine as it enters the body and then attacks the troubled area.	MP 1571 Immunization MP 1571 Antibiotics Health 5 - Laidlaw pp. 185-192 Health 4 - Laidlaw pp. 166-181 Miracle Drugs and the New Age of Medicine, Reinfeld,Fred

BROAD OBJECTIVE: Children understand that every substance taken into the body by any means enters into the complex functions of the body and effects its condition.

Grades: 4, 5, 6
Correlated Areas: Health, Language Arts

Learnings	Pupil Experiences	References
Children learn that a substance taken into the body by smoking effects its condition	Let pupils think through and discuss how they think smoking effects the body. List these ideas on the board. (These do not have to be accurate)	Health 6 - Laidlaw Ch. 12, pp. 206-209 Health Guide 5 T 1-21, pp. 182-201
(This section is not intended to be an exhaustive study on the Dangers of Smoking nor are the other learnings under this Broad Objective. The purpose is simply to learn how smoking effects the body.)	Let the children do research work on Smoking and how it effects the body. Suggest that they write to: California Interagency on Cigarette Smoking and Health, Sacramento, Calif. 95813, besides what information they can glean from the libraries.	Smoking Education Kit, (Smoking Research of San Diego) The Huffless, Puffless Dragon, (American Cancer Society)
	View the filmstrip, Respiratory System. Discuss.	FSR 112 I'll Choose the High Road
	Trace the passage of air through the nose to the lungs. Let the children make a list of the functions of the respiratory System. Use wall chart.	FSR 113 To Smoke or Not to Smoke FS 2273 Respiratory System FS 3317 Your Heart and Lungs MP 1005 Mechanisms of Breathing The Story of your Respiratory System, Weart, Edith L. The Respiratory System (wall chart), Help Fight Tuberculosis (booklet), Nat'l. Tuberculosis Assoc.

BROAD OBJECTIVE: Children understand that every substance taken into the body by any means enters into the complex functions of the body and effects its condition

Grades: 4, 5, 6
Correlated Areas: Health, Language Arts

Learnings	Pupil Experiences	References
Children learn that a substance taken into the body by many methods can effect the Brain and Nervous System. They also learn the importance of safegaurding these and how.	Let students suggest tests for voluntary and involuntary actions. Applying the brakes to one's bicycle when an object crosses in front of you - voluntary. Crossing your legs and then hitting one knee with your hand to watch the foot rise is an example of an involuntary action, etc. Have students observe the size of the human brain from a model or chart Some questions that could be used to make oral or written reports, class discussions, and panel discussions are: 1) What are the main parts of the nervous system? 2) What is the main control center for the nervous system? 3) What else does the brain do besides receive and send out messages? 4) What parts of the body help the brain receive and send messages? 5) What makes it possible for you to make use of a past experience? 6) How fast can a nerve impulse travel over your network of nerves? (Ask for examples of times when it is important that they be able to act quickly. Can anything in our body function keep the nerve impulses from traveling quickly? 7) Some children may wish to compare the sizes of brains brains of different animals. 8) Why is your nervous system important to your safety? 9) Does your nervous system have anything to do with: hearing, seeing, tasting, touching, or breathing?	Story of Your Glands, Weart, Edith L. MP 5246 Human Body: Muscular System Health 5 - Laidlaw pp. 162-181 (excellent) FS 2037 Nervous System

BROAD OBJECTIVE: Children understand that every substance taken into the body by any means enters into the complex functions of the body and effects its condition.

Grades: 4, 5, 6
Correlated Areas: Health
Art

Learnings	Pupil Experiences	References
Children learn that a substance taken into the body by many methods can effect the Brain and Nervous System. They also learn the importance of safeguarding these and how.	10) How does the nervous system work with the digestive system to help you digest food?	Our Senses-What They Do For Us, (FILM) Coronet Films.
	11) Why is it especially important to avoid injury to nerve cells?	
	12) Can nerve cells be replaced?	
	13) Children can do research on the brain and the nervous system and report to the class.	
	Make a list of health rules that can help protect the nervous system. From these children may wish to make posters or design and make bulletin boards illustrating some of these important rules.	
	They may wish to make diagrams of the human brain and the nervous system.	

BROAD OBJECTIVE: Children recognize that drugs are beneficial to themselves and to Mankind when used properly.

Grades: 4, 5, 6
Correlated Areas: Health, Language Arts, Social Studies

Learning

Children learn what medicines are and from where they come and in what forms.

Pupil Experiences

Let the children begin making a scrapbook from articles in newspapers and periodicals concerning drugs, ie, New Drugs to help mankind and also Drug Abuse. (Drug Advertisements might be included)

Make a list of common household medicines

Discuss uses for the drugs

Make a class chart (see below) Add information as reports are given.

Drug	Form	Where It Came From
Aspirin	Tablet	
Digitalis	Tablet	
Quinine	Tablet	
Tincture of Iodine	Liquid	
Mentholatum	Salve	

Select a committee of pupils to do reference work on such specifics as the following:

a) Man's early search in the world of nature for substances to relieve his ills

b) Drugs derived directly from natural sources and still in use today

c) The development of synthetic drugs and their importance in medicine today

d) Special drugs and their importance to man, what form they take and where it came from

e) The growth of the drug industry in recent years

References

Health 4 - Laidlaw
pp 176-177

Health 6 - Laidlaw
pp 153-161

T1599 Prison of the Dead
(Discovery of Vitamins)

Vitamins and Your Health
(booklet)
National Vitamin Foundation

Miracle Drugs and the New Age of Medicine, Reinfeld, Fred

Modern Medical Disc., Eberle, Irmengarde

Men of Medicine, Shippen, K.B. (teacher reference)

BROAD OBJECTIVE: Children recognize that drugs are beneficial to themselves and to Mankind when used properly.

GRADES: 4, 5, 6
Correlated Areas: Health
Language Arts, Social
Studies

Learning	Pupil Experiences	References
Children learn what medicines are and from where they come and in what forms.	Bring labels from some common antiseptics for class to discuss Display and label drawing or photographs of various kinds of pills, use a tray with a few prescription bottles.	

BROAD OBJECTIVE: Children recognize that drugs are beneficial to Mankind when properly used.

Grades: 4, 5, 6
Correlated Areas: Health
Language Arts

Learning	Pupil Experiences	References
Children learn that drugs can be helpful.	Show film to learn how drugs can be helpful.	MP 2123 Infectious Diseases and Man Made Defenses
	Invite a parent or friend who is a doctor to visit the class to discuss medicine (drugs) and their uses. or Tape an interview with a doctor discussing important drugs which are used for combating common diseases	MP 5237 Antibiotics Doctors and What They Do, Coy, Harold
	Let children give impromptu talks on an experience of an illness or injury and the effect of a drug.	
Children learn the difference between prescription and non-prescripion drugs.	Make a list of non-prescription and prescription drugs you might have in the medicine chest.	
	List responses on the chalkboard. Let the children divide these into groups (accuracy in categories unnecessary).	
	Ask: 1) What is the difference in these? 2) Why are prescriptions necessary? 3) Does it matter who takes the drugs? Why? 4) Does it matter how much of the drug is taken? Why? 5) Under what conditions might a person take the wrong medicine?	
	Invite a pharmacist to visit the class and explain the use of prescription and non-prescription drugs.	

BROAD OBJECTIVE: Children recognize that drugs are beneficial to Mankind and themselves when properly used.

Grades: 4, 5,6
Correlated Areas: Health, Language Arts, Art

Learnings	Pupil Experiences	References
Children learn that some medicines should be prescribed	Discuss why certain drugs need a doctor's prescription. Continue the discussion by indicating how drugs can harm a person if not properly used.	
	Let children discuss and role play: Select two pupils to dramatize a situation in which a person with a bottle of pills offers one of them to a friend who is complaining of a minor ailment. The friend refuses to take it and then describes the dangers of accepting pills from any unauthorized individual.	
Children become aware of the proper storage of household drugs.	Let the pupils draw up some tentative suggestions as to the proper handling of medicines and medications which are kept in their homes. A list might include: 1) keep all medical supplies in a safe location, particularly in a place that is out of reach of very young children; 2) place a label on each container that tells the degree of potential danger of the medicine; 3) determine whether the place chosen for the storage and safekeeping of family medicines is satisfactory from the standpoint of temperature, humidity, cleanliness, and the like; and 4) decide on the best ways of discarding or disposing of pills and other medications that have lost their effectiveness.	
	When the pupils have done this, have them review their lists of suggestions with their parents and report the results to the class.	
	Let children make posters as class projects to portray the proper storage of drugs.	

BROAD OBJECTIVE: Children recognize that drugs are beneficial to them and to Mankind when properly used.

Grades: 4, 5, 6
Correlated Areas: Health, Language Arts

Learnings	Pupil Experiences	References
Children learn the difference between prescription and non-prescription drugs.	Have children write stories about having to take a prescribed drug. Incorporate the following ideas: a) What was the illness or injury? b) What did your parents do? c) What did the doctor do? d) What drug was prescribed? e) How much was to be taken and how often? f) What were the results? Have children write a description of a person they feel is mentally healthy; one who is physically healthy.	

BROAD OBJECTIVE: Children recognize that nonfood substances are potentially damaging to the body and should be used only under special circumstances and with extreme care.

Grades: 4, 5, 6
Correlated Areas: Health, Language Arts, Art

Learnings	Pupil Experiences	References
Children describe substances that are potentially damaging to the body which are found in and around their homes.	Let children make a list and discuss household substances which are potentially harmful to the human body. Have the pupils ask their parents to make a list with them of substances in their own homes which are potentially harmful to the human body, such as detergents, insect poisons, volatile chemicals, lye, and snarol.	MP 1900 Make Your Home Safe T 1358 Safety House FS 1106 Hidden Enemies in the Home?
	Let the children make a display exhibit of dangerous household substances and describe their use in class.	
	Invite a chemistry or biology teacher to talk to the class about the nature of dangerous household chemicals and the precautions that should be observed in their use.	T Glue Sniffing - California State Dept. of Ed. MacDonald-A. Kitzinger
	Have the pupils read the labels and determine what each substance contains which might make it dangerous.	
	Let the children design labels which might be placed on containers as warnings.	
	Let the children choose committees to do reference work on poisonous plans. Here are some suggestions:	
	1) Consult the color plate, "Poisonous Plants," opposite page 1768 in the Third Edition of Webster's unabridged New International Dictionary. Make drawings of plants that are found growing in California, such as the castor-oil plant, loco weed, and Jimson weed or Datura. Try to locate pictures in books, magazines, or other sources, too.	

BROAD OBJECTIVE: Children recognize that nonfood substances are potentially damaging to the body and should be used only under special circumstances and with extreme care.

Grades: 4, 5, 6
Correlated Areas: Health, Science

Learnings	Pupil Experiences	References
Children describe substances that are potentially damaging to the body which are found in and around their homes.	2) Have pupils make a list of poisonous plants that grow in California. Look in encyclopedias and other books to find the desired information and have them ask their parents and other members of the family to tell them about poisonous plants that either grow wild or are cultivated in California. The list should include oleander, poison oak, and certain types of poisonous mushrooms as well as the plants identified in Number 1. 3) Have pupils write a description of each plant that is named on their list. After committee has completed its project, have its members report their findings to the class. In making their reports, the pupils should describe the poisonous properties of the plants they have studied and display the drawings they have made. 4) After the committee's presentation, invite the class to discuss: a) the information reported on; and b) the precautions that should be taken in protecting oneself and others from poisonous plants; and c) the possible injurious effects that can result from coming into contact with them. Invite someone from the local health department to speak to the class about poisonous plants found in their communities a) how to identify plant b) precautions to take when near it and any other pertinent information.	Health Tips - Calif. Medical Assoc., 693 Sutter St., San Francisco 94102. Index 8 "Harmless" Medication and Accidental Poisoning

BROAD OBJECTIVE: Children recognize that nonfood substances are potentially damaging to the body and should be used only under special circumstances and with extreme care.

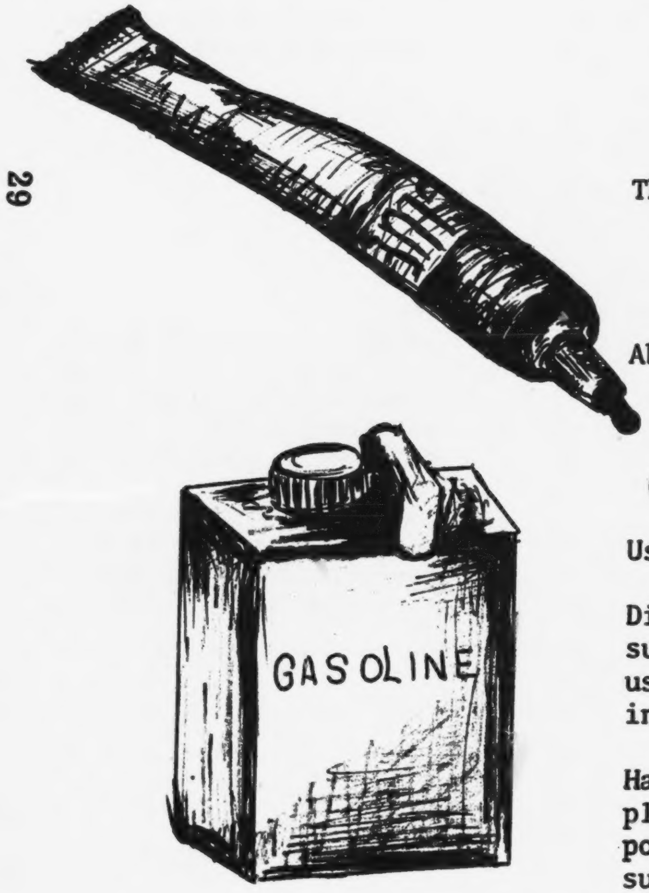
Grades: 4, 5, 6
Correlated Areas:
Health, Language Arts, Art

Learnings	Pupil Experiences	References
Children recognize that potentially dangerous substances must be stored in proper containers and in safe places.	Let children discuss where these substances are stored (properly or improperly) and have them decide good places for storage.	
Children learn to recognize common household substances that are potentially damaging to the body and might be found in and around their homes.	Let pupils role play situations where improper storage of substances led to an accident or mishap and what was done about it or could have been done.	
	Have interested children make cartoons illustrating proper and improper storage of household substances.	
	Encourage the children to refer back to list of potentially harmful household substances.	First Aid Textbook for Juniors, American National Red Cross
	Let pupils discuss what might happen if each were used improperly.	Safety (a safety game). New York Central System
Children learn proper procedures for emergency treatment.	Help children decide what emergency measures should be taken in each instance; i.e., call the doctor, (have emergency phone numbers in a handy location), read the labels or antidotes, etc.	First Aid Quiz (pamphlet of questions and answers regarding eight common accidents), Metropolitan Life Insurance Company
	Let the children role play emergency first aid measures: 1) Baby sister swallows drano 2) Cleanser or hair spray is sprayed in the eye	MP 1474 Artificial Respiration
	Invite the school nurse to visit and answer any questions on emergency treatment and perhaps demonstrate common procedures.	FS 2717 Your Responsibilities in First Aid
	Invite a local fireman to discuss and demonstrate emergency treatment procedures.	Tips on First Aid (pamphlet), Pacific Telegraph Co., Plant Dept.

BROAD OBJECTIVE: Children recognize that nonfood substances are potentially damaging to the body and should be used only under special circumstances and with extreme care.

Grades: 4, 5, 6
Correlated Areas:
Health, Art, Language Arts

Learnings	Pupil Experiences	References
Children learn to recognize common household substances that are potentially damaging to the body and might be found in and around their homes. VOLATILE SUBSTANCES	VOLATILE SUBSTANCES contain: Toluene, Naptha, Acetone, Xylene or related hydrocarbons. They include: plastic cements, glues, paint thinners, gasoline, igniting fluids, and other chemical solvents	Winston Charts (Available in Buildings)- Winston Products, San Diego
	Inhalation commonly results in: intoxication dizziness possible loss of consciousness slurred speech staggering irritability rash, foolish and even dangerous actions	F.S. 3317 - Your Heart and Lungs T 6210 Glue Sniffing - MacDonald
	The "glue-sniffer" commonly: has inflamed eyes has irritated nose and lung tissue loses appetite and weight feels constantly sick	
	Abuse results in: liver damage kidney damage brain damage destruction of bone marrow (Any of the above may result in death)	Drug Abuse Source Book, State Dept. of Educ., Sacramento, Calif. pp. 19-23
	Use Winston Chart #30 - Discuss	
	Display an exhibit of dangerous household substances. Discuss with the pupils how using these can cause bodily damage - by inhaling, touching, or swallowing.	
	Have pupils make appropriate labels to be placed on containers to warn people of the possible dangers involved in using the substances.	



BROAD OBJECTIVE: Children recognize that nonfood substances are potentially damaging to the body and should be used only under special circumstances and with extreme care.

Grades: 4, 5, 6
Correlated Areas:
Health, Art, Language Arts

Learnings	Pupil Experiences	References
VOLATILE SUBSTANCES	Pupils may wish to choose a committee to make out a list of questions pertaining to certain difficulties or problems which they think that managers of local stores, such as hobby shops, supermarkets, or novelty stores might encounter in selling substances containing volatile chemicals as well as other dangerous substances.	
	Have the pupils ask their parents to suggest ways in which these managers might handle such problems.	
	after the committee has obtained the desired information, let the pupils report their findings to the class. Let the rest of the pupils in the class discuss the findings and suggest additional methods they believe would be helpful.	

BROAD OBJECTIVE: Children recognize that drugs can be harmful to themselves and mankind when used improperly, especially narcotics.

Grades: 4, 5, 6
Correlated Areas:
Health, Language Arts,
Art

Learnings

Children learn to recognize common drugs they are most likely to come in contact with and the dangers which they can produce.

AMPHETAMINES AND BARBITURATES

Pupil Experiences

Use Winston Chart iii, review again briefly through discussion the value of Narcotics and Drugs.

Children may wish to give 30 second impromptu talks on Drugs that contribute greatly to society.

Use Winston Chart 1A to review Drug Classifications. Discuss information the pupils already know about: Stimulants, Depressants, Hallucinogenic Drugs. Perhaps some of them have used some of these for medicinal purposes. Have the children compile a list of these which they know about. They may wish to make a chart showing:

Drug	Form	Effect
Amphetamine	tablet	stimulant

or

Drug	Form	Use	Abuse
Amphetamine	tablet	Dieting	Pep Pills

A notebook may be started including: chart (above) which they would continually add to, reports by individuals on the different drugs - their uses and abuses and effects, illustrations describing form and effects of the drug, etc.

Children may wish to role play situations where the drug is used properly and improperly.

AMPHETAMINE (Winston Chart #12) Stimulates Nervous System

References

Health 6
pp. 206-209

Narcotics and Dangerous Drugs, Winston Pro. for Ed. San Diego (Available in every building) Excellent Charts.

The Up and Down Drugs, U.S. Dept. of Health, Education, and Welfare (5¢-$3.25 per 100) Amphetamines & Barbiturates

Drug Abuse, Calif. State Dept. of Ed. (Teachers -Available in buildings)

No Secret (pamphlet)
Neyenesch Printers, Inc.
San Diego City Schools
Curriculum Services Div.

Dangerous Drugs I.D. Kit - Winston Products for Ed. (Available in buildings)

Mp 6758 - Drugs and the Nervous System

FS 2037 Nervous System

BROAD OBJECTIVE: Children recognize that drugs can be harmful to themselves and Mankind when used improperly, especially narcotics.

Grades: 4, 5, 6
Correlated Areas: Art
Health

Learnings	Pupil Experiences	References
	Medical Uses 1. Narcolepsy (attacks of sleep) 2. Depression 3. Weight Control Abuse excitability tremor of hands talkativeness enlarged pupils restlessness heavy perspiration sleeplessness Abuse can cause: High blood pressure Abnormal Heart rhythms Heart attacks Suicidal attempts Use Winston Charts No. 12,13,14 & 15 Discuss these thoroughly. These include: Amphetamine Sulfate Tablet Dextroampetamine Sulfate Tablet Dexamyl Methamphetamine Hydrochloride Tablet Methamphetamine Powder Also the Effects of Stimulants Posters or charts may be drawn showing good and bad effects of these drugs.	

BROAD OBJECTIVE: Children recognize that drugs can be harmful to themselves and Mankind when used improperly, especially narcotics.

Grades: 4, 5,6
Correlated Areas: Art-Health, Language Arts

Learnings	Pupil Experiences	References
Children learn to recognize common drugs they are most likely to come in contact with and the dangers which they can produce.	BARBITURATES -- Sedatives, Sleeping Pills Medical Uses 1. High blood pressure 2. Epilepsy 3. Insomnia 4. Diagnoses & Treatment of Mental Illness 5. Relax patients before and after surgery Abuse slurred speach staggering loss of balance and falling quick temper a quarrelsome disposition coma (danger of pneumonia & death) Abuse can cause: insomnia nausea convulsions exhaustion mental confusion delirium hallucinations barbiturate poisoning-death Use Winston Charts no. 15a - 21a 21B is a Combination of Drugs Discuss these thoroughly. These include: Secobarbital Sodium CApsule Sodium Pentobarbital Capsule Amobarbital Sodium Capsule Amobarbital Sodium and Secobarbital Sodium Capsules Continue Notebook including reports by pupils, add to the Chart and include illustrations. Role play showing medical uses and human abuses would be very good here. Let children illustrate good and bad effects of this drug by posters, charts, cartoon or bulletin boards.	Film: "The Teens"

BROAD OBJECTIVE: Children recognize that drugs can be harmful to themselves and Mankind when used improperly, especially narcotics.

Grades: 4, 5, 6
Correlated Areas: Art, Health, Science

Learnings

Children learn to recognize common drugs they are most likely to come in contact with and the dangers which they can produce.

MARIJUANA

Pupil Experiences

MARIJUANA - mild "hallucinogen"

Medical Uses (Mostly Asia & Africa)
Legally restricted in nearly every civilized country.

1. Relieve pain durring surgery
2. Used in India as a Medicine
3. Used in religious ceremonies or as a native medicine

Abuse
- ataxia (inability to coordinate movements)
- lowering amounts of glucose in blood
- lowering of over-all body temperature
- increased appetite and desire for sweets
- inflammation of mucous membranes

Abuse can cause:
- hilarity
- carelessness
- distortion of sensation and perception
- impairment of judgement and memory
- irritability and confusion

Use Winston Charts No. 2 - 11c.
Discuss thoroughly.
Children may wish to draw pictures showing the marijuana plant - leaf structure and size of plant.

Use the Marijuana Awareness Wafer (part of Winston Kit) to see it and smell it.
Use Marijuana Cigarette Kit (part of Winston Kit)

A Field Trip to the U.S. Customs & Immigration Services at San Ysidro (Tijuana Border Station) to familiarize terminology and help in identification, may be decided upon.

References

Marijuana, Some Questions and Answers (pamphlet)
U.S. Dept. of Health, Ed. & Welfare (5¢ -$3.75 per 1--)

"Marijuana Use by Young People," from Drug Addiction in Youth, Winick, Charles
American Social Health Assoc.

MP 5165 Drug Addiction

MP 5065 Marijuana

BROAD OBJECTIVE: Children recognize that drugs can be harmful to themselves and Mankind when used improperly, especially narcotics.

Grades: 4, 5, 6
Correlated Areas: Health, Art, Language Arts

Learnings	Pupil Experiences	References
Children learn to recognize common drugs that they are most likely to come in contact with and the dangers which they can produce. MARIJUANA	Let the pupils continue their reports. This one might include: 1) Identification of the plant (leaf, packaged, and unpackaged) 2) How it is used (illustrate difference between marijuana cigarette and commercial cigarette) 3) What are the effects of marijuana? (physical and psychological) 4) How is it obtained? 5) Why is it used? 6) What does science know about it? 7) Does it cause a dependence on it? 8) What does the law state concerning it? 9) Does it lead to use of other drugs or narcotics? Use role play to show: How it is obtained Why it is used What physical effects are produced Add to the chart which was begun on Drugs Bulletin board could be made using information gleaned by the students. Some children may wish to have a debate to discuss if Marijuana should be legalized or not.	MP 1218 You and Your Friends MP 1565 Developing Self Reliance

BROAD OBJECTIVES: Children recognize that drugs can be harmful to themsleves and Mankind when used improperly, especially narcotics.

Grades: 4, 5, 6
Correlated Areas: Health, Language Arts

Learnings	Pupil Experiences	References
Children learn to recognize common drugs that they are most likely to come in contact with and the dangers which they can produce.	NARCOTICS - Opiates, Analgesics (morphine, heroin, and opium, cocaine) Medical Use - mostly as a pain killer Synthetic Narcotics: demoral and Methadone	Narcotics, Some Questions and Answers, U.S. Dept. of Health, Educ. & Welfare (pamphlet-5¢, $3.25 per 100)
	Abuses a blunting of the senses euphoria (a sense of well-being) stupor coma	MP 6735 Hooked
	Abuse can cause: malnutrition withdrawal symptoms 18 hours after discontinuance addiction life span shortened 15-20 years	
	Use Winston Cahrts No. 22-27 Discuss thoroughly.	
	Children will want to continue reports. They may include the following: 1) What are Narcotic Drugs? 2) What is narcotic addiction? 3) What is the effect of the drug? 4) Who takes narcotics? 5) What is the life of an addict like? 6) Does addiction lead to crime? 7) What are the legal penalties? 8) What is the medical view of addiction?	
	Children will add to the chart they started in the beginning.	
	Role play can be used in various ways. For this age child, reasons for use and the effects upon their bodies and society would be best to emphasize rather than the methods of use.	
	There are ex-addicts in the San Diego Area. A visit from one of them would be worth class time.	Synanon or The In Between

BROAD OBJECTIVE: Children recognize that drugs can be harmful to themselves and Mankind when used improperly, especially narcotics

Grades: 4, 5, 6
Correlated Areas: Health, Language Arts

Learnings	Pupil Experiences	References
Children learn to recognize common drugs that they are most likely to come in contact with and the dangers which they can produce.	LSD - (a hallucinogenic drug) d-lysergic acid diethylamide tarrate Medical Use - Tested as a possible treatment for mental and emotional illness, and for alcoholism.	LSD - Some Questions and Answers, U.S. Dept. of Health, Ed., and Welfare (pamphlet) 5¢, $3.25 per 100
LSD	Abuse Hallucinations panic distortion and intensification of color and sound perception personality changes loss of sanity impulses towards suicidal acts psychosis	MP 6795 Insight or Insanity
	Abuse can cause: dilated pupils nausea increase in blood pressure, heart rate, and blood sugar chills, flushed, and irregular breathing trembling sweating of the hands	MP 6794 LSD: Twenty-five
	Use Winston Chart No. 28	
	Children will want to continue reports. They may include the following: 1) What is LSD? 2) Why do people take LSD? 3) What are its physical effects? 4) What are its psychological effects? 5) Does the drug affect thinking? 6) Does LSD increase creativity? 7) How does the drug act? 8) Is LSD dangerous? 9) Does LSD cause mental illness? 10) Does LSD cause birth defects? 11) Are there special hazards for young users?	

BROAD OBJECTIVE: Children recognize that drugs can be harmful to themselves and Mankind when used improperly, especially narcotics.

Grades: 4, 5, 6
Correlated Areas: Art
Social Studies,
Language Arts

Learnings	Pupil Experiences	References
	12) How does the law view LSD?	
	Children will add to the chart they started in the beginning.	
	Interested and well-informed students may wish to form a panel discussion to answer and discuss some of the above questions after their written reports are finished. A symposium could follow where other members of the class could inject questions for the panel to discuss.	
	Invite guest narcotic agents, social workers, or policemen, etc.	
	Bulletin boards could be made and designed by students illustrating some of their learnings.	
	Design a "Question Box" for children to add to what they would like to know.	

BROAD OBJECTIVE: Children gain experience in the whole realm of decision making through group discussion, student involvement, games, TV Commercials

Grades: 4, 5, 6
Correlated Areas: Health, Language Arts

Learning	Pupil Experience	References
Children learn that they are always making decisions and learn some principles for decision making.	Let the children make a list of the decisions that they have made during the past twenty-four hours. Then have the class discuss some of these. Have them decide which were wise decisions and which were not and WHY?	FS 2748 Thinking for Yourself FS 1434 Enjoying Today FS 1848 Leaders and Followers FS 453 Free Time is Decisions
	Let the pupils discuss and compile a list of principles which help them in decision making.	
	Six basic steps in the decision making process might be: 1) Identify the problem 2) Establishing plans for study and action 3) Collecting and interpreting information 4) REaching a tentative conclusion 5) Taking action 6) Evaluating action (living with your decisions)	Health 4 - Laidlaw
	Using the principles they have begun with (they may wish to add others) have them discuss or write down how they dicide on the following: 1) How they spend their free time 2) What books to read 3) What shows to see (Movie & TV) 4) How they spend their money 5) What games they will play and with whom 6) What homework will be done and the quality 7) What health principles they will practice - choosing to abuse drugs or choosing not to abuse drugs 8) What friends they will choose 9) Which TV or radio commercials (or other forms of advertizing are factual or not) 10) Pose situations and encourage group discussion to arrive at a decision individually and collectively e.g. a) unhappy home problem - older or younger siblings b) how do I get people to listen to me	Conflicts, Politics, and Freedom Quigley, Ginn & Co.

BROAD OBJECTIVE: Children gain experience in the whole realm of decision making through group discussion, student involvement, games TV Commercials

Grades: 4, 5, 6
Correlated Areas: Health
Language Arts

Learnings	Pupil Experiences	References
Children learn that they are always making decisions and learn some principles for decision making	c) a group of boys or girls may call you "chicken" for not doing something wrong. The pupils may wish to organize committees responsible for informing the class about some of the drug-promotional efforts that are carried on in the modern world. The committees might do the following: 1) make a bulletin-board display of drug advertisements 2) make a tape recording of drug advertisements on TV and radio and play the recording in the classroom 3) discuss the meaning of various slogans that are used in advertising drugs and tell how some of this slogan information gives wrong ideas. 4) list suggestive types of advertising The pupils may wish to write limericks on the comical side of drug advertisements. Some pupils may wish to rewrite some TV or radio commercials and offer factual information. Other pupils may wish to clip advertisements from magazine and newspapers on drugs and then develop their own format using factual information. Through class discussion help the pupils to realize that the important decisions of life are the ones they are making right now. They may write an essay on "My Decisions Are Important Today". In the essay have them include wome of the afore mentioned decisions and what bearing their decisions today have on tomorrow. Some of these may be read to the class and then discussed. A contest for the BEST essays could be planned. Make a vocabulary list of words used in advertising.	

BROAD OBJECTIVE: Children gain experience in the whole realm of decision making through group discussions, student involvement, games, TV Commercials

Grades: 4, 5, 6
Correlated Areas: Health,
Language Arts

Learning	Pupil Experiences	References
	Make a vocabulary list of words used in advertising	
	Classify "good versus Bad" advertisements heard on TV and radio, and read in newspapers and periodicals	

BROAD OBJECTIVE: Children are aware of the importance of good citizenship and respect for the law, especially in the area of drug abuse.

Grades: 4, 5, 6
Correlated Areas: Social - Studies, Language Arts, Art

Learnings	Pupil Experiences	References
Pupils learn what the laws are concerning drugs, why they were made, and their responsibility as citizens for upholding them.	List the rules for several games or specific school rules and then discuss the reasons for them.	MP 2167 Beginning Responsibility: Rules at School
	Discuss border regulations regarding foods and drugs brought into California.	Health 4 - Laidlaw pp. 6-21
	A Customs Agent could be invited to speak to the class.	Health 5 - Laidlaw pp. 69-193
	Let the class conduct research on state and federal laws relating to the use of dangerous drugs. Make a list of these. Let the class discuss these and decide if these are good laws and why.	Laws for Youth (booklet), Juvenile Protection Committee San Diego County MP 5386 The Toymaker
	Let the class write papers on these different laws. Include in their papers: 1) What the Law States 2) What is my responsibility as a citizen in keeping the law 3) How the law protects the citizen 4) If I disagree with the law - what can I do about it (proper procedures, etc.)	MP 1518 Are You a Good Citizen MP 1487 Other Person's Property The President's Commission on Law Enforcement and Admin. of Justice, Task Force on Narcotics and Drug Abuse, Task Force Report: Narcotics and Drug Abuse, Wash, D.C. $1.00
	Bulletin board could be made showing the importance of upholding the laws, or on being a good citizen.	
	Posters could be made illustrating being good citizens at school as well as in upholding the laws of the city and state.	

BROAD OBJECTIVE: Parent involvement - creating positive attitudes at home and bringing correct information into the home, creating an awareness to the drug problem

Grades: 4, 5, 6

Learnings	Pupil Experiences	References
Children learn to involve their parents in Drug Abuse problems so that together they can face the issues and resolve them.	Pupils might take a letter home at the beginning of the Drug Abuse Course which explains the purposes of the course, some of the content, and some brief suggestions about how the parents can help their child.	Drugs, Your Child & You, Frank, Peter R. , Curriculum Coordinator San Diego County Dept. of Ed. San Diego Police Dept., San Diego, California
	As the children make their Scrap Books of magazine and newspaper articles on Drugs you use and abuse they should be encouraged to discuss these articles with their parents and make notes of what reactions both parents and child had - any disagreements felt and how they resolved their differences, how their parents helped them understand the articles and any other outcomes. These should be discussed in class.	Sample letter home (see appendix)
	Parents could be invited to school to view some of the films used in the Drug Education Program.	
	Teacher should be aware of TV Programs planned on Drug Abuse and make recommendations to the class always suggesting that the parents watch too. The same procedure can be used here as was used by parents and children with the articles for the Scrap Book.	
	Parents and children could go to the San Diego Police Dept. and view together their display of Drugs - reactions should be brought back to class and discussed.	
	Throughout the course children should be encouraged to discuss issues with parents and ask their opinions and draw from their knowledge.	

BROAD OBJECTIVE: Parent involvement - creating positive attitudes at home and bringing correct information into the home, creating an awareness to the drug problem

Grades: 4, 5, 6

Learnings	Pupil Experiences	References
	o If there are any especially good outcomes of learning experiences in the class, parents should be invited to the class to observe or even participate, i.e.,	MP 5111 Family Teamwork MP 1950 Our Family Works Together
	1) Debate on legality of Marijuana	
	2) Display of Household Substances - Food and Non-food - let children explain their uses and abuses.	
	3) Panel Discussion on the laws concerning drugs, - how they protect us, etc.	
	4) A play or skit which may develop from role play experiences.	
	5) Special guests invited to the class - (parents would benefit from this too) a. Doctors b. Pharmacists c. Customs Officers d. Policemen e. County Health Officer f. Chemistry Teachers g. School Psychologist h. School Counselor i. Minister j. Parent of child who has used drugs k. Probation Officer l. Narcotics Officer m. School Nurse	
	6) Display of written reports or essays - have some of these explained or given orally.	
	At the end of the course a letter could be taken home thanking their parents for their help and interest.	

APPENDIX I - REFERENCES

GRADES: FOUR, FIVE, AND SIX

MP Motion Pictures (Available from San Diego County Department of Education)

Catalog Number	Title, Grade Level, and Description
MP 6245	ABOUT THE HUMAN BODY (Intermediate and Jr. High) A boy visits a doctor's office. Animation is used to explore functions of bones, ligaments, muscles. Shows working of nervous, respiratory, digestive, circulatory systems. Emphasizes good health routines. Correlated to state health texts.
MP 1102	A COMMUNITY KEEPS HEALTHY (Primary and Intermediate) Discusses what is necessary in order to make a community healthy. Shows the community health department inspectors who visit dairies and markets, the city workers who clean streets, and water department workers who keep water pure.
MP 5237	ANTIBIOTICS (Junior High) Describes an important weapon in man's fight against disease. Animated drawings portray how antibiotics fight against specific diseases such as pneumonia.
MP 1518	ARE YOU A GOOD CITIZEN (Intermediate) Presents the rights and duties of a good citizen in a democratic society, as exemplified by the man chosen to preside over a "Citizenship Day" celebration.
MP 1474	ARTIFICIAL RESPIRATION (Intermediate and Junior High) Demonstrates the back pressure arm lift method of artificial respiration.
MP 2167	BEGINNING RESPONSIBILITY: RULES AT SCHOOL (Primary and Intermediate) Explains how a class makes rules and why they are important. Considers the reasons for following school rules about promptness, good conduct, and playground safety.

Motion Pictures (Available from San Diego County Department of Education) Continued

Catalog Number	Title, Grade Level, and Description
MP 2034	CIRCULATION WHY AND HOW (Junior High) How the heart circulates the blood, and roles of the arteries, veins, and capillaries.
MP 1565	DEVELOPING SELF RELIANCE (Junior High) Analyzes the steps in developing self-reliance -- assume responsibility, be informed, know where you're going, and make your own decisions.
MP 1098	DIGESTION IN OUR BODIES (Intermediate) The steps in the digestive process are traced and functions of main organs explained. Shows how and why food must be digested before the body can use it.
MP 1591	DON'T BE AFRAID (Intermediate) Helps children to understand that fear is normal and often is nature's way of getting them to avoid danger, but when there is no real danger fears can be overcome by various simple means such as talking them over with an understanding adult.
MP 1587	DON'T GET ANGRY (Intermediate) Explains that anger is a natural emotion and demonstrates how it can be liberated in various desirable ways resulting in a healthier situation than in keeping it bottled up inside.
MP 6758	DRUGS AND THE NERVOUS SYSTEM (Junior High) Demonstrates the medical value of drugs properly used and the disastrous effects of the same drugs on the human body when used without knowledge. Traces the effects of airplane glue, stimulants, depressants, and hallucinogens on the body.

Motion Pictures (Available from San Diego County Department of Education) Continued

Catalog Number	Title, Grade Level, and Description
MP 5111	FAMILY TEAMWORK (Intermediate) Stresses good attitudes and habits on the part of the children and real family solidarity. A film story of a family working and playing together as a team at home and in outside activities.
MP 6006	HEALTH IN OUR COMMUNITY (Intermediate) Shows how the Health Department helps all of us keep well.
MP 6735	HOOKED (Junior High) Describes the experience of drug addiction told in the words of a group of young, former drug addicts. Should be previewed by the teacher before use.
MP 5254	HOW HONEST ARE YOU? (Intermediate and Junior High) Tries to help young people think through values and techniques of honesty in the more complicated situations.
MP 5246	HUMAN BODY: MUSCULAR SYSTEM (Intermediate and Junior High) Discusses the three types of muscle and explains the structure and function of voluntary muscle tissue. Shows the role of the nerve impulse in muscular contraction and describes the role of ATP in muscular movement.
MP 5245	HUMAN BODY, NUTRITION AND METABOLISM (Intermediate and Junior High) Distinguishes between basal metabolism and active metabolism. Discusses five classes of chemical substances which comprise all natural foods and explains basic chemistry by which they supply our bodies with energy and essential chemicals.
MP 5584	HUMAN MACHINE (Junior High) Overview of many of the body's functional systems, such as the skeletal, nervous, and circulatory systems. Shows their relationship to the balanced whole. Useful for giving students an appreciation of the bodies.

Motion Pictures (Available from San Diego County Department of Education) Continued

Catalog Number	Title, Grade Level, and Description
MP 1571	IMMUNIZATION (Junior High) Explains what immunization is and how it is attained by immunity through actual illness, and through the use of vaccine. Shows modern techniques of preparing and using vaccine for smallpox, diphtheria, and pneumonia.
MP 2124	INFECTIOUS DISEASES AND MAN MADE DEFENSES (Junior High) Shows causes of infectious diseases and explains how we use man-made defenses to protect ourselves. We see how antitoxins, vaccines, antibiotics, and synthetic drugs are produced and used to develop immunity.
MP 1809	LEARNING ABOUT OUR BODIES (Intermediate and Junior High) Animation and cinefluorography answer the question, "What's inside me?" Emphasis is given to bones and various types of joints, muscles in general, and to the heart and diaphragm in particular. Several ways of studying ourselves are suggested.
MP 1473	LEARNING FROM DISAPPOINTMENTS (Intermediate) Tells how three children who are not chosen for roles in the school pageant overcome disappointment in various ways--through good sportsmanship, by choosing another goal, and by trying again in a different way.
MP 6795	LSD: INSIGHT OR INSANITY (Junior High) Explains what medical sciences know of the physiologic and psychologic actions of LSD. Describes the dangers in the unsupervised use of LSD. Tells some of the facts that are unknown about the actions and possible consequences of LSD.
MP 6794	LSD: TWENTY-FIVE (Junior High) Discusses how LSD is manufactured and distributed. Emphasizes the dangers of use of the drug.

Motion Pictures (Available from San Diego County Department of Education) Continued

Catalog Number	Title, Grade Level, and Description
MP 1900	MAKE YOUR HOME SAFE (Intermediate) Emphasizes an attitude toward safety. Speaks specifically of such danger spots in the home as electric outlets, medicine cabinets, sharp objects, and fires.
MP 1005	MECHANISMS OF BREATHING (Junior High) Animated drawings show the work of pharynx, larynx, trachea, bronchi, and bronchiole. Shows the exchange of oxygen and carbon dioxide and the mechanisms that correlate the rate of breathing with the rate of body activity.
MP 1572	OTHER FELLOW'S FEELINGS (Intermediate and Junior) Deals with the problem of teasing or ridicule which is prolonged to point where it really hurts. No conclusions are drawn, but students are stimulated to arrive at their own solutions to the problem.
MP 1487	OTHER PERSON'S PROPERTY (Intermediate) Tells the story of three boys whose prank results in serious property damage. Stresses the effects they hadn't counted on; necessity of redoing room, loss of time, illness of classmates.
MP 1282	THE COMMON COLD (Intermediate) Explains how cold symptoms appear in early stages of many diseases, how colds may become serious, how to guard against them, and what to do to cure a common cold.
MP 5328	UNDERSTANDING YOUR EMOTIONS (Junior High) Introduces the basic emotions of fear, rage, and love. Discusses conditioning, effects of emotion on bodily functions, and measuring of emotional responses.
MP 1372	U. S. DEFENSE AGAINST FOREIGN PLAGUE (Intermediate and Junior High) Presents the work of the sanitary inspectors at forty-seven ports of entry. They see that no ships or animals bring disease into the United States through inspecting crew and cargo, fumigating infested quarters, and testing rats.

Motion Pictures (Available from San Diego County Department of Education) Continued)

Catalog Number	Title, Grade Level, and Description
MP 5299	WORLD OF LITTLE THINGS (Junior High) Shows in a drop of water under the microscope the life and activities of water fleas, protozoa, amoeba, and paramecium. Also shows plants and animals living in the salt water.
MP 1218	YOU AND YOUR FRIENDS (Junior High) Shows teen-age party. Audience evaluates types of behavior, and is encouraged to select qualities needed in a friend: loyalty, dependability, and courtesy.

APPENDIX II - REFERENCES

GRADES: FOUR, FIVE, AND SIX

Film Strips (Available from San Diego County Department of Education)

Catalog Number	Title, Grade Level, and Description
FS 1107	BACTERIA - GOOD AND BAD (Intermediate) Good and bad bacteria, how a community can prevent spread of harmful bacteria
FS 2143	CIRCULATORY SYSTEM (Junior) Explains structure, function, and proper care of circulatory system
FS 1298	COMMUNICABLE DISEASES (Intermediate) Disease transmission and its prevention by water purification, sanitation, and immunization.
FS 1434	ENJOYING TODAY (Intermediate) Encourages group participation while discouraging daydreaming
FS 1612	FOOD IN THE BODY A (Junior) Shows how to test foods for the starch, simple sugars, fats, and proteins
FS 1613	FOOD IN THE BODY B (Junior) Shows what takes place in digesting nutrients in the human body
FS 453	FREE TIME IS DECISIONS (Primary and Intermediate) Through discussion, stimulates children to express ideas and develop understandings about use of free time
FSR 112	I'LL CHOOSE THE HIGH ROAD (Intermediate and Junior High) Designed to inform the pre-teens of risks of cigarette smoking before they start to smoke.
FS 1848	LEADERS AND FOLLOWERS (Intermediate) Stresses importance of good followers, as well as good leaders

Film Strips (Available from San Diego County Department of Education) Continued

Catalog Number	Title, Grade Level, and Description
FS 1943	MAINTAINING COMMUNITY HEALTH (Intermediate) Work of health departments in disease prevention and control
FS 2034	NERVOUS SYSTEM (Intermediate and Junior) Brain areas and functions, how brain sends messages, controls heartbeat; breathing through nerves
FS 2273	RESPIRATORY SYSTEM (Junior) Explains structure, function, and proper care of respiratory system
FS 2748	THINKING FOR YOURSELF (Intermediate) Importance of thinking for oneself; accepting responsibility for one's decision
FSR 113	TO SMOKE OR NOT TO SMOKE (Junior High) Presents information regarding evidence that shows cigarette smoking is a strong factor in causing cancer.
FS 3315	YOUR FOOD AND DIGESTION (Intermediate) Discusses how foods help you, how the body uses food, and health rules.
FS 3317	YOUR HEART AND LUNGS (Intermediate) Explains how the heart and lungs work, what blood is like, and care of heart and lungs.
FS 2717	YOUR RESPONSIBILITIES IN FIRST AID (Junior High) Outlines nine principles of first aid

Pupil Textbooks (State Basic and Supplementary Reading Books to Correlate with Guide)

GRADE FOUR

Text	Story Title	Publisher	Date
Sounds of Mystery	"My Face," Poem p. 40 (Mental Health) "My Favorite Things," p. 184 (Mental Health)	Holt, Rinehart & Winston, Inc.	1967
Trade Winds	"Little Leaguer's First Uniform," pp. 25-39 (Handicapped by size) Johnny Cook, youngest member of his Little League team, had a chance to play in the World Series when his older brother became ill. He was handicapped by his small size. An announcer laughingly called him "All-Pants John." Later that name was his baseball trademark.	Harper and Row	1966
Open Highways (Designed for children with reading difficulties)	"Shoeshine Boy," pp. 8-17 (Problem Solving) Story concerns Teddy, who found himself in need of funds his mother could not afford. Teddy solved his problem by hitting on a special approach that brought him success. "Swimming Hole," pp. 52-56 (Overcoming Discouragement) Steve becomes discouraged and hostile in a group of seasoned swimmers. He had a lesson to learn about his own behavior, and learned it with the help of his new friends at the swimming hole.	Scott, Foresman & Company	1966

Pupil Textbooks (State Basic and Supplementary Reading Book to Correlate with Guide) Continued

GRADE FOUR

Text	Story Title	Publisher	Date
Open Highways (Continued)	"The Wright Brothers," pp. 103-108 (Persevering Through Discouragement) Both Langley and the Wrights spent years in patient experimentation before tasing even a modicum of success. But although they knew discouragement they persevered. (Good for boys)		
	"S. O. S. Adventure," pp. 184-195 (First Aid Procedure) Paul and Don stayed with Big Jerry in a trapper's cabin while their parents were away. Joy turned to anxiety when they came home one stormy day and found Big Jerry seriously injured.	Scott, Foresman & Company	1966
	"Dr. Dan," pp. 324-329 (Medical Heroes-New Medicine) The drama of the operating room and the vulnerability of the human heart heighten the suspense in this true story of experimental surgery. Dr. Dan Williams broke ground in new medicine and in the area of human relationships.		
	"Shantyboat Boy," pp. 330-339 (Accepting Unwelcome Decisions made by an Adult) A child's problem in accepting an unwelcome decision made by adults. The working out of such a problem forms the plot of this story.		
	"A Lantern for Liberty," pp. 354-369 (Working out Problems) Story of boyish trouble and the working out of a personal problem--the mixed-up behavior that may characterize anyone under the stress of disappointment and anxiety. (Setting: Battle of Lexington)		

Pupil Textbooks (State Basic and Supplementary Reading Books to Correlate with Guide) Continued

GRADE FOUR

Text	Story Title	Publisher	Date
Open Highways (Continued)	"The Story of Annie Oakley," pp. 390-404 (Appreciating the Human Body) Story of Annie Moses (Annie Oakley) who was an exceptional marksman before she was tall enough to load a rifle alone. Her precocious skills are portrayed in the context of a family crisis.	Scott, Foresman & Co.	1966
The Magic Word	"Set Free," pp. 27-32 (Overcoming Physical Problems) The story of Helen Keller, who overcame her inability to hear or speak. "Zoo Doctor," pp. 143-147 (Drugs for Animals) Story of how a doctor resolved the problem of administering drugs to an 8,000 pound elephant, Sudana.	Macmillan	1966
Much Majesty	"Three Strong Women," p. 3 (Physical Strength) A tall tale from Japan concerning three strong women and a wrestler who are strong beyond the limits of ordinary imagination. "Scarey Sarey" (Mental and Physical Health), p. 138 Tells about one incident in the life of a child with cerebral palsy. Realistic story presented in accordance with sound principles of sound mental and physical health.	Harcourt, Bruce & World	1968

Pupil Textbooks (State Basic and Supplementary Reading Books to Correlate with Guide) Contin

GRADE FOUR

Text	Story Title	Publisher	Date
Trade Winds	"The Biggest Nobody," pp. 293-306 (Mental Attitude about Self) Katie John, the new girl in school, feels like the biggest nobody in her class. Through a ticket selling contest the pupils in her class discover her basic good intentions; she is no longer a Nobody, but is called, "Good Old Katie."	Harper and Row	1966

GRADE FIVE

Text	Story Title	Publisher	Date
Open Highways (Designed for children with reading difficulties)	"The Farmer Astronomer," pp. 152-169 (Overcoming Disappointments) From the first moment he sees a star through a telescope, Clyde Tombaugh dreams of becoming an astronomer. Disappointments spur him on. Hard work doesn't stop him. And he proves that dreams can come true.	Scott, Foresman & Company	1966
Crossroads	"All-Around Athlete," pp. 39-47 (Physical Appreciation) Babe Dedrickson became known in the sports world in 1932 when, as the "one girl team" from Texas, she won the National Track & Field Championship. This accomplishment made it possible for her to realize her goal: a chance to compete in the Olympics.	Harper and Row	1966
	"Helen Keller," pp. 195-200 (Doing the best with what you have--Overcoming Problems) This is an excerpt from her autobiography. She provides insights into the world of the blind-deaf. And she relates her early attempts to learn.	Harper and Row	1966

Pupil Textbooks (State Basic and Supplementary Reading Books to Correlate with Guide) Continued

GRADE FIVE

Text	Story Title	Publisher	Date
Crossroads (Continued)	"Pioneers in Medicine," pp. 288-297 (Medical Pioneers-Mayo Bros.) This biographical sketch of the Mayo brothers concentrates on a single day in 1883 when both were young men.	Harper and Row	1966
	"Artificial Respiration," pp. 335-337 (First Aid) This picture story covers some of the methods of artificial respiration men have used through the ages.		
	"Alchemists: Fathers of Chemistry," pp. 399-407 (Medical Pioneers) What is alchemy? Why is it called the precursor of chemistry? This essay answers these questions and provides insights into ways the European alchemists of old thought.		

GRADE SIX

Text	Story Title	Publisher	Date
Sounds of a Distant Drum	"Food, Glorious Food," pp. 88-94 (Digestion-Eating)	Holt, Rinehart & Winston, Inc.	1967
	"A Cock-eyed Optimist," p. 95 (Song - Mental Health)		
	"Three Friday," pp. 162-171 (Mental Health) (Decisions) The Hodja's amusing ways of solving problems.		
	"The Princess and the Vagabond," pp. 240-258 (Changing a Bad Personality) Based on Shakespeare's "Taming of the Shrew" The story of a haughty princess who had to learn the hard way selflessness and love of others.		

Pupil Textbooks (State Basic and Supplementary Reading Books to Correlate with Guide) Continued

GRADE SIX

Text	Story Title	Publisher	Date
Sounds of a Distant Drum (Continued)	"Proud Peacock," pp. 288-298 (Same plot as "The Princess and the Vagabond)	Holt, Rinehart & Winston	1967
	"Our Country, Tis of Thee," pp. 260-277 (Citizenship) This is a historical cantata telling the history of our country. (Excellent for Choral Reading)		
Seven Seas	"The 'Peppi' Teichner Story," pp. 28-37 (Overcoming Handicaps) This is the biography of Peppi and how he overcame handicaps--deformed foot and asthma--to become accomplished in mountain climbing, skiing, and track.	Harper and Row	1966
	"Alvin's Secret Code," pp. 170-181 (Advertising - Making Choices) How through careful detective work Alvin learned that an expensive stereo hi-fi set was a four-year old model; parents thus were able to buy it at a great discount.		
First Splendor	"Queenie," p. 20 (Decisions) The story of a girl trying to work out her sense of values very much on her own.	Harcourt, Brace & World	1968
	"The Men's Side," p. 276 (Overcoming Physical Problems) Takes place in Britain before the Romans came. The story revolves around Drem, a boy with one crippled arm, who after several years overcomes his handicap.		

Pupil Textbooks (State Basic and Supplementary Reading Books to Correlate with Guide) Continued

GRADE SIX

Text	Story Title	Publisher	Date
First Splendor (Continued)	"Sixty Fathers for Tien Pao," p. 319 (Nutrition) Tale of a Chinese boy which tells the reactions of a child so exhausted and hungry that sleep, food, and some kind of security outweigh his need to find his family and his fears of the new and strange. His understanding and politeness and even his affection for his pet pig disappear when his basic need for food is thwarted.	Harcourt, Brace & World	1968
	"An Unexpected Contestant," p. 391 (Physical Strength) Odysseus has many heroic qualities: as a devisor of a daring plan, a cunning deceptor gentleman, as a super-strong, quick-thinking man among enemies, as a proud and loving father. He is, also, the vengeful victor.		
Open Highways (Designed for children with reading difficulties)	"The Ernie Davis Story," p. 34-41 (Appreciation-Physical Ability) Story about an athletic hero admired by everyone. Personality traits, abilities, and talents enabled Ernie Davis to become an all-American football star.	Scott, Foresman & Co.	1966
	"The Adventures of Suzy Sherlock," pp. 105-112 (Decision Making) Moving swiftly and quite unpredictably to a climax that makes the narrator, 12-year old Suzy, a heroine, this action story provides problems to be identified and solutions to be noted.		

Pupil Textbooks (State Basic and Supplementary Reading Books to Correlate with Guide) Continued

GRADE SIX

Text	Story Title	Publisher	Date
Open Highways (Continued)	"Louis Pasteur," pp. 125-129 (Medical Heroes) Highlighting two of Louis Pasteur's most important discoveries, this article dramatizes his battle against rabies by relating a true incident.	Scott, Foresman & Co.	1966
	"Terry's Troubles," pp. 226-241 (Problem Solving-Decision Making) Assessing Terry's situation, pupils will discover that others have the same kinds of problems and feelings they have. Through a discussion of Terry's behavior they may gain deeper insights into how to cope with the perplexities in their own lives.		

Drug Abuse: An annotated Bibliography of Selected Free and
Inexpensive Materials (Recommended by California
State Department of Education)

American Medical Association, Committee on Alcoholism and Drug Dependence, Council on Mental Health. *The Crutch that Cripples: Drug Dependence*. Chicago. The Association, 1967. 25 p. *Available from the Department of Mental Health*, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610. Single copy: 25 cents.

A concise nontechnical review of the basic facts about drug dependence and drug abuse. Covers the nature and effects of narcotics, sedatives, stimulants, and hallucinogens (including marijuana). Typical subtitles, such as "Riding the Merry-Go-Round (narcotics), "Fervor with a False Face" (stimulants), and "It Can Be a One-Way Trip" (hallucinogens) indicate the popular approach which makes this authentic material interesting to and readable by parents, teachers, or students.

Bloomquist, Edward R.,"Marijuana: Social Benefit or Social Detriment?" *California Medicine*, May 1967, pp. 346-352. Available free from the Narcotic Educational Foundation *of America, 5055* Sunset Boulevard, Los Angeles, California 90027.

In response to those who advocate the legalization of marijuana, Dr. Bloomquist details its physical and psychological effects and analyzes the motivations of its users, paying special attention to the entrance of "intellectuals" into the community of drug users. He takes up and effectively disposes of various arguments favoring the legalization of the drug, notably those which equate marijuana with tobacco and alcohol. He affirms the association of crimes of violence with marijuana use and the tendency of marijuana users to become involved with other drugs. He closes with President Lincoln's warning: "If destruction be our lot, we ourselves must be its author and finisher. As a nation of free men, we must live through all time, or die by suicide."

Bowen, Haskell L., compiler, *Drug Abuse Information: Teacher Resource Material*, 1968. 282 p. Available from the Santa *Clara County Office of Education, 70 West Hedding* Street, San Jose, California 95110. $2.50.

A compilation designed to supply teachers with ready reference material on drugs and drug abuse. Contains material from the American Medical Association, fact sheets from The Food and Drug Administration, Bureau of Drug Abuse Control, and articles on various aspects of the field by well-known authorities, including almost a dozen articles by Drs. Ungerleider and Fisher of the UCLA Center for the Health Sciences. Includes also a glossary of terms, a proposed three-week teaching sequence, a bibliography and film list.

Bowen, Haskell L., compiler, *Drug Facts*, 1967. 24 p. Available from the Santa Clara County Office of Education, 70 West *Hedding Street*, San Jose, California 95110. Single copy: 22 cents.

A condensed presentation, for student use, of basic facts about drugs and the laws designed to control their use. A dozen possible consequences of drug abuse are listed, with the suggestion that students consider them before making a decision to abuse drugs.

Drug Abuse: An annotated Bibliography of Selected Free and Inexpensive Materials (Recommended by California State Department of Education)

(Continued)

California Medical Association, "Where We Stand on Drug Abuse," August 27, 1967. Four mimeo sheets. Available free from the Association, 693 Sutter Street, San Francisco, California 94102.

In this short paper the Association sketches the problem of indiscriminate use of drugs, upholds present legal restrictions designed to control drug abuse, and adopts as its official position a statement by Dana Farnsworth, M. D., of Harvard University, stressing the dangers inherent in the use of marijuana and LSD. The Association calls for further scientific evidence concerning the effects of specific drugs and for continuing scientific study of drug abuse as a whole.

California School Health, Special issues on Drug Use and Society, Part I, Winter 1968, and Part II, Spring 1968. Available from the California School Health Association, 693 Sutter Street, San Francisco, California 94102. $1.50 each.

A symposium of the views--many of them controversial--of an unusual variety of experts in many fields, such as government, medicine, psychology, sociology, religion, law, public health, and education. Although diverse in content, approach, and conclusions, the articles by these experts explode various myths which cling to the field and explore philosophical, psychological, social, and legal factors underlying drug use and abuse. Bibliographies accompany several of the articles and an annotated bibliography is featured in the Spring issue

California's Health, "Drug Abuse," Special issue, February, 1968. Available from the State Department of Public Health, Bureau of Health Education, 2151 Berkeley Way, Berkeley, California 94704. Single copies free.

A timely well-illustrated issue of this monthly publication, prepared by medical and public health experts. Contains articles on "Drugs and their effects," "The new generation and the new drugs," and "Drugs and the Law," and proposes a single agency to coordinate the various California agencies that are concerned with drug abuse. Includes a critical review of several current films on drug abuse.

Drug Abuse: Escape to Nowhere. A Guide for Educators, Philadelphia, Smith Kline and French Laboratories, 1967. 104 p. Available from the National Education Association, Publication-Sales Department, 1201 Sixteenth Street, N. W., Washington, D. C. 20036. $2.00.

A valuable compendium of standard material on drugs and the drug abuser. Contains an interesting historical perspective on man's use of drugs from the stone age to the present. Proposes school policies and procedures, including an educational program, for preventing and controlling drug abuse among students; stresses the desirability of cooperation among school, parents, physicians, and police in behalf of student welfare. Contains helpful appendix material, including a reference chart on drugs commonly abused.

Drug Abuse: An annotated Bibliography of Selected Free and
Inexpensive Materials (Recommended by California
State Department of Education)

(Continued)

Bureau of Narcotics and Dangerous Drugs, Fact Sheets. Available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20204, 50¢.

Topics covered in Fact Sheets 1 - 10 are: 1) The Drug Abuse Control Amendments of 1964, 2) The Illegal Traffic in Dangerous Drugs, 3) The Drug Abuser, 4) Depressants, 5) Hallucinogens, 6) Stimulants, 7) Controlled Drugs, 8) Hallucinogens--A Select Bibliography, 9) Bibliography of Selected Popular References on Hallucinogenic Drugs, 10) Stimulants and Depressants--A Bibliography 1964-67.

Food and Drug Administration, "LSD: The False Illusion," FDA Papers, Part I, July-August, 1967, Part II, September 1967. Available in reprint form from Superintendent of Documents, Government Printing Office, Washington, D. C. 20204. Part I: 15 cents; Part II: 10 cents.

Part I deals with the nature and effects of LSD, the claims and expectations of its advocates, and the development of laws controlling its use. Part II describes other hallucinogens and traces the mushrooming abuse of LSD and the concurrent development of a black market to supply the demand for the drug. Both articles are well illustrated and together they present a definitive review of the status of the drug and its use at the time of writing.

The President's Commission on Law Enforcement and Administration of Justice, Task Force on Narcotics and Drug Abuse, Task Force Report: Narcotics and Drug Abuse, Washington, D. C., Government Printing Office, 1967. 158 p. Available from Superintendent of Documents, Washington, D. C. 20402. $1.00.

The first 20 pages of this document constitute the report and recommendations of the President's Task Force, presenting definitive material on drugs and their effects; on enforcement, crime and penalties; on treatment and civil commitment; and on medical practice and addiction. The remainder of the document consists of appendices written by experts (notably by Richard H. Blum, Ph. D., Stanford University) and covering with textbook thoroughness the field of drugs and drug abuse and social, legal, and medical factors related thereto. The report is documented throughout and Dr. Blum's material is supported by extensive bibliographies. The report and recommendations (pp. 1-20) are included, with illustrations but without documentation, in The Challenge of Crime in a Free Society: A Report by the President's Commission on Law Enforcement and Administration of Justice (Washington, D. C., Government Printing Office, 1967 pp. 211-231)

Drug Abuse: An annotated Bibliography of Selected Free and
Inexpensive Materials (Recommended by California
State Department of Education)

(Continued)

San Diego City Schools, Curriculum Services Division, No Secret: A Compilation of Information on Narcotics and Dangerous Drugs, San Diego, California, May 1967. 14 p. Available from Neyenesch Printers, Inc., 2750 Kettner Boulevard, San Diego, California. Single copy: 10 cents.

A condensed presentation, for student use, of basic facts about drugs commonly abused. Contains a section designed to alert students to the legal consequences of drug abuse and another which invites students to consider, prior to making a decision, a dozen possible consequences of drug abuse.

"Straight Talk About the Drug Problem," School Management, February 1968, pp. 52-60, 96-100. Available through school administrators or district/county offices.

A second attack by School Management on the problem of drug abuse. The first appeared in June, 1966, but was, according to this article, "a dismal flop," ignored by schoolmen at that time as "sensational." Within the short span of 19 months the situation has changed and school administrators are crying for help with the drug abuse problem. This series presents incidents of youthful drug abuse in various parts of the country; answers questions on the nature and scope of the problem and the school's role in solving it; and presents in revised form "A Schoolman's Guide to Illicit Drugs," urging that copies of this material be placed in the hands of all teachers and administrators. Using Ithaca, New York, as an example, the article deals with the role of district attorney, police, community, and school in solving the problem.

Winick, Charles, "Marijuana Use by Young People," from Drug Addiction in Youth, Ernest Harms, ed., Pergamon Press, New York, 1965. 18 p. Available in reprint form from Americal Social Health Association, 1740 Broadway, New York, New York 10019.

Covers worldwide use of marijuana, its history and current status in the United States. Deals at length with the effects of the drug and the psychological and social ramifications of its use. A thorough study by a recognized expert.

World Health: The Magazine of the World Health Organization, Special issue on drugs, July 1967. 38 p. Available in many libraries or from Columbia University Press, International Documents Service, 136 South Broadway, Irvington-on-Hudson, New York, 10533. Single copy: 50 cents.

Through its usual eloquent writing and superb illustration this publication surveys the world's drug scene, discusses what drugs do to us, and explores our reasons for abusing them. It discusses the ways in which we attempt to deal with the people already dependent on drugs and considers means of preventing the spread of drug abuse. In conclusion it states, "The only feasible solution seems to be to try to limit the damage, to inform the public accurately of the real dangers of drug abuse, and to build a society from which people no longer want desperately to escape."

DRUG ABUSE EDUCATION

GRADES: 4, 5, 6

BIBLIOGRAPHY

Don't Be a Dope, San Diego County Probation Department, 220 W. Broadway, San Diego, California

Drug Abuse, A Source Book and Guide for Teachers, California State Department of Education

Drugs, Your Child, and You. Frank, Peter R., Curriculum Coordinator, San Diego County Dept. of Education

LSD: Some Questions and Answers, U. S. Department of Health, Education, and Welfare Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 Price 5¢ ($3.25 per 100)

Marijuana: Some Questions and Answers, U. S. Department of Health, Education, and Welfare Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402

Narcotics and Dangerous Drug Abuse, Instructor's Guide; McGrath, Richard F., Winston Products for Education, San Diego, California

Narcotics: Some Questions and Answers, U. S. Department of Health, Education and Welfare Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 Price: 5¢ ($3.25 per 100)

The Up and Down Drugs, Amphetamines and Barbiturates, U. S. Department of Health, Education and Welfare, Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. Price: 5¢ ($3.25 per 100)

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Grades: 4, 5, 6

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Organizations listed without asterisk have specifically identified materials that are available and are listed in the guides for grades one through eight. The remaining organizations make available materials related to their products. These may be obtained upon request. School stationery should be used in requesting materials.

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*BORDEN COMPANY
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DRUG ABUSE EDUCATION

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San Diego, Calif. 92123

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Battle Creek, Mich. 49016

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Chicago, Ill. 60690

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Pearl River, N. Y. 10965

*LEVER BROTHERS COMPANY
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San Francisco, Calif. 94120

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New York, N. Y. 10019

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Washington, D. C. 20006

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Bethesda, Md. 20014

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Chicago, Ill. 60603

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3861 Front Street
San Diego, Calif. 92103

NATIONAL VITAMIN FOUNDATION
250 West 57th Street
New York, N. Y. 10019

NEW YORK CENTRAL SYSTEM
Office of Director of Safety
466 Lexington Avenue
New York, N. Y. 10017

(PAN) Marijuana Awareness Packet
Winston Products
P. O. Box 12219
San Diego, Calif. 92112

PHARMACEUTICAL MANUFACTURERS ASSN.
1155 15th Street, N.W.
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CHAS. PFIZER & CO., INC.
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San Diego, Calif. 92103

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Room 6002, County Courthouse
220 West Broadway
San Diego, Calif. 92101

SAN DIEGO COUNTY DEPT. OF PUBLIC HEALTH
1600 Pacific Highway
San Diego, Calif. 92101

SAN DIEGO MENTAL HEALTH ASSN.
350 Cedar Street
San Diego, Calif. 92101

SCIENCE RESEARCH ASSOCIATES, INC.
259 E. Erie Street
Chicago, Ill. 60611

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1500 Spring Garden Street
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San Francisco Unified School District
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One of a Series

An Interagency Federal Committee was convened in the winter of 1969 under the auspices of the White House to make available to the Nation's schools a variety of State and local curricula for drug education and the prevention of drug abuse. Participating in the Committee chaired by the Office of Education, DHEW, were the Bureau of Narcotics and Dangerous Drugs, Department of Justice; the National Institute of Mental Health, DHEW; and the Office of Economic Opportunity.

As an initial step, the Committee established an Interdisciplinary Panel of non-Government professionals to review some of the drug abuse curricula developed by State and local school systems. Time did not permit a review of all curricula in use throughout the country.

The curricula selected are not recommended for adoption, but are distributed only as resources to assist schools in initiating or improving programs. All schools are encouraged to submit curricula and materials to the National Clearinghouse for Drug Abuse Information. These will be reviewed by the Panel and those selected will be made available to other school systems upon request. Your cooperation will be appreciated.

Selected curricula have been reprinted with the permission of the originating school systems. Single courtesy copies are available from the National Clearinghouse for Drug Abuse Information. An order blank to the Superintendent of Documents, GPO appears on the back of this publication if additional copies are desired.

The National Clearinghouse for Drug Abuse Information, operated by the National Institute of Mental Health, is the focal point for Federal information on drug abuse. The Clearinghouse provides information on request through publications, and a computerized information service. The Clearinghouse distributes publications and refers specialized and technical inquiries to Federal, State, local, and private information resources. Inquiries should be directed to the National Clearinghouse for Drug Abuse Information, Educational Services, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

INTRODUCTION

The problem of drug abuse is not a new phenomenon. Man's use and abuse of drugs dates back thousands of years. In recent years, however, the dimensions of the problem have reached frightening proportions, raising the specter of societal suicide. Contributors to our current concerns have been the easy accessibility of a myriad of drugs, a tense, stressful social environment, thrill seeking and escapism, among others.

In addressing itself to so complex a problem the discipline of education must go beyond mere dispensing of information and make a stronger effort to effect student attitudinal and behavioral change. The more traditional teaching methods will be inadequate to do the task. This implies the need for broadscale teacher training and retraining in new approaches and techniques. Periodic reinforcement will be needed if the operational style of the classroom is to change. What is required is a long-range view that will aim at the preparation of health educators and other school personnel who can address themselves to this and other serious health problems.

There must also be cooperation and involvement of all other segments of the community in a joint effort with the school if the mounting trend of drug abuse is to be reversed. The closeness of the effort needed is a condition that both the school and the community organizations will find unfamiliar, but melding of community effort is essential if the common objectives are to be met.

The tasks described above will require significant, long-term financial support and commitment. They will also require wise, perceptive leadership from national and state levels. An effective program of bread-based education should produce significant results by the end of the decade.

Interdisciplinary Panel

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San Francisco Unified School District

THE INSTRUCTIONAL PROGRAM ON DRUGS AND HAZARDOUS SUBSTANCES IN THE SAN FRANCISCO UNIFIED SCHOOL DISTRICT, 1969-70

Overview

The top priority in health instruction this year is a preventive program on drugs and hazardous substances.

Within the context of what is happening in the lives of children and youth in our society instruction includes a critical study of a broad spectrum of non-food substances which may be helpful or harmful, and of the human factors which may unleash the potential of drugs for the preservation or the destruction of human life. Among the substances studied are alcohol, tobacco, caffeine, legal unrestricted and restricted drugs, illegal drugs, and non-drugs such as volatile chemicals, solvents, and others. Laws governing drugs, the potential consequences of legal infractions, and sociological aspects are also discussed. The sequential instructional continuum in each of grades K through 12, is based upon the philosophy that human behavior and decision-making influence drug abuse far more than does chemistry.

The target group is youth who are still in the mainstream of society. We believe that we may reach those in this group who are uninformed or misinformed, and those who will accept guidance. We doubt if classroom instruction can reach the extreme deviants who need therapy.

The major objectives are:

1. To guide pupils to understand the value systems and motivations which underlie the use, misuse and abuse of drugs and hazardous substances.

2. To provide opportunities for pupils to examine critically a wide range of factual information and expert opinion, and to distinguish between and evaluate them.

3. To discourage the experimental and recreational use of drugs.

Funding is derived from the budget allotment for the total health and family life education program. Financial support is inadequate. Volunteer services and occasional donations are needed from individuals, service clubs and business firms to stretch the budget.

Staff consists of two persons: The Supervisor of Health and Family Life Education and a teacher-specialist. Both are veteran teachers and counselors who have studied the drug scene in depth for the last 15 years as classroom teachers, counselors, doctoral and post-doctoral students. Their duties include not only the drug program, but the total broad program of health and family life education in 137 schools and liaison between parents, teachers, pupils and community.

The Instructional Program

The chart below summarizes the program which is being developed and evaluated by teachers and administrators with the help of volunteer experts and with the cooperation of the PTA. Not included in this chart are three supportive services: Counseling, parent group education, and school nursing services. These are the responsibilities of the Pupil Personnel Services, Adult Education, and Public Health, respectively.

An outline of the scope and sequence of the instructional program is appended.

Superintendent and Central Office Administrators
Drug Abuse Advisory Committee
Supervisor and teacher specialist, Health & Family Life Education

Elementary School	Junior High School	Senior High School
Principal	Principal & Asst. Prin.	Principal & Asst. Principal
Drug resource teacher,* drug information center	Drug resource teacher,** drug information center	Drug resource teacher,** drug information center
Classroom teachers:	Subject teachers:	Subject teachers:
Gr. K-2: 3 lessons	Gr. 7, Health-PE: 5 lessons	Gr. 10, Family Life Education, 10 lessons
Gr. 3, 4, 5, 6: 5 lessons	Gr. 8, Science: 5 lessons	Gr. 11, Health-PE: 5 lessons
	Gr. 9, Social studies: 5 lessons	Gr. 12, Senior Civics 2: 5 lessons

* No time or pay allowance.

** Subject to availability of funds, this teacher will be given one period per day for this assignment in each secondary school starting in February, 1970.

Determination of Needs

No citywide surveys have been made. Data are gathered from research reported in the professional literature, some surveys done in individual schools, and empirical observations and expert opinions of persons closely allied with youth and the drug scene. From these sources we have concluded:

1. Many teenagers and some pre-teenagers use potentially harmful substances for experimental and recreational purposes, sometimes without apparent harm and sometimes with serious outcomes. The consensus of the studies reviewed and the experts interviewed indicates that 40 per cent of secondary school pupils probably use drugs of some kind and to some extent for non-therapeutic purposes. For a much smaller per cent of pupils, drug use may be characterized as neurotic or psychotic.

2. Drug misuse in San Francisco is influenced by subcultures in the Mission, Haight-Ashbury, the Tenderloin and the Fillmore-Western Addition districts within the city, and others in adjacent counties.

3. Drug-related arrests, school drop-outs, (physical or mental), suspensions and expulsions, have increased.

4. Many incidents of violence, vandalism, social and racial tensions in and near schools, suicide, accidental injuries and death, appear to be drug-related.

5. Drug misuse occurs in all neighborhoods and among all subcultures in the city.

Drugs Pupils Use

Research studies indicate that marihuana is a remote third in popularity among teenagers to tobacco and alcohol, both of which appear to be used by approximately 84% of pupils by the twelfth grade and by two or three per cent as early as the third grade. Other drugs, such as the amphetamines and barbiturates, are less widely used for recreational purposes, but their use appears to be increasing. Youth also experiments with non-drug substances, such as airplane glue, gasoline, spot removers, hair spray, coolants, rat poison, morning glory seeds, catnip, oregano, nutmeg, lemon extract, paint thinner and many others. The drug of choice is selected because of its availability, cost, peer and subcultural acceptability and past experience. Some of our youth use drugs secretly and discreetly and only at week-end parties, while others use them daily in classrooms, hallways, restrooms, in their own homes and in public.

Reasons for Drug Abuse

Because of the complexity of adolescents and the social milieu in which they live, no single, definitive reason can be given. Some contributing factors appear to be:

1. The influence of a drug-oriented society: Parent models who use unnecessarily, or misuse, alcohol, tobacco and escape drugs; parents who are unable or do not desire to control their children's illegal use of alcohol and tobacco or indiscriminate use of over-the-counter remedies for minor everyday discomforts.

2. Pressures to use drugs: Advertising, peer fads, and pattern of seeking immediate relief from normal tensions and stresses.

3. Youth's perception of adult hypocrisy: The use and even the abuse of alcohol and tobacco are socially and legally sanctioned by adults who are horrified at the remote possibility of sanctions of drugs of youth's choice and of comparable risks.

4. The isolation and segregation of youth from adults: Youth grows up in a setting where hired supervisors, babysitters, teachers, agency leaders care for their needs. They are left to develop their own philosophies and behavior patterns within the only group they know well, their peer culture.

5. Other influences: Poverty of some, among the affluence of most, atomic threats, wars, discrimination, instant need gratification expected by many people, lack of roles and responsibilities for youth, youth's suspicions and resentments of adult motives and practices to preserve the status quo of a way of life they see as far from satisfactory or healthful.

Limitations of the Effectiveness of School Instruction

Alone, the school cannot affect the societal changes which must take place before the drug scene can be replaced by something less life-threatening. At best, drug education can be a band-aid measure which may prevent the spread of drug abuse. It may be an antidote for the chemical cop-out of a whole generation.

Philosophy

Traditional instruction characterized by exhortation, moralizing, and fear inducing techniques lack credibility and only widen the generation gap. Instruction must focus more on what is happening each day in adolescents' and children's lives than on the pharmacological properties of a variety of drugs that range in their effects from mild to lethal. Instructional plans must reflect the fact that drug abuse occurs on different levels: one time trial, occasional use for pleasure, anxiety relief and masking problems, and compulsion, and that drug effects vary with set, setting, the kind and amount of the drug used, and other factors. Adults must recognize that many responsible youth view social use of mild drugs, legal and illegal, differently than does the establishment. Teachers (and parents) who teach that all drugs, legal and illegal, have the same potential for threatening health enhance the credibility and generation gaps and are teaching dishonesty or ignorance by poor example.

Within this framework, then, we consider facts and expert opinions important; but equally important is the teaching of skills which enable pupils to examine evidence and evaluate it. Most important is helping young people from kindergarten throughout the school years to understand human motivations and relationships, and to develop decision making skills which will enable them to resist the temptation to experiment with drugs or use them for recreational purposes.

Pilot Projects

The projects, methods and plans listed below are trial balloons aimed to prevent young people from injuring themselves by misusing and abusing drugs. Direct and indirect instruction should be in the context of the very real problems and concerns our students have about drugs as one of many problems youth face as they grow up.

1. K-12 sequential instructional program and grade level lesson plans.

   These have been prepared by a committee of selected teachers representative of each educational level. There is a package program of 5 lesson plans for each grade, except for grades K, 1 and 2 (3 lessons) and grade 10 (10 lessons). The lessons suggest objectives, major concepts, learning opportunities, evaluative procedures, and pupil and teacher instructional aids and references. Within time and budget limits, these lessons plans will be used in each school, evaluated, revised and augmented.

2. Teacher preparation:

   As an outcome of several District in-service courses held during the past eighteen months, about 700 teachers have completed at least one in-service course on the drug scene. Courses are offered throughout the school year and during the summer. Some courses are of the survey type, while others are seminar groups which visit community agencies and have conferences with therapists and addicts and users under therapy. Some courses will focus on training key teachers in each school to prepare them to conduct teacher preparation sessions on each school site.

3. School site Drug Information Center and resource teacher.

   Each school has been asked to organize a Drug Information Center for teachers, parents and pupils. A resource teacher from the regular school staff is in charge of the Center, which serves as a depository for instructional materials and references, a counseling and referral center, a teacher education center, and a channel through which parent-school-community efforts may be coordinated and evaluated.

4. Student visitations to rehabilitation agencies.

   In each of two senior high schools approximately 100 pupils selected by their peers visited, in groups of about 10, a variety of rehabilitation and treatment agencies and drop-in centers. They shared their observations, learning, and impressions with their classmates in and out of classes. Evaluation was highly favorable.

5. Teachers' field trip to Mendocino State Hospital, "The Family" Drug Therapy Unit.

   About 100 teachers, representative of all secondary and some elementary schools, spent one Saturday at this agency exchanging ideas with patients and therapists in small group seminars. Evaluation was highly favorable.

6. Former drug addicts as resource persons in the school.

Following a careful orientation of administrators, teachers and parent representatives, screened former users and addicts are utilized as resource persons for formal classes and informal discussions. Evaluation is highly favorable. If funds become available, the District will hire,, orient and supervise a corps of former addicts for assignment to secondary schools upon the request of the principal.

7. Professional resource persons.

The Medical Society, the Barristers Club and the University of California Medical Center provide volunteer resource persons for teacher training, parent meetings and classroom programs. Other resource persons are occasionally available, such as neighborhood pharmacists, probation officers and agency counselors. Evaluation is highly favorable.

8. Trial use of Lockheed "Drug Decision" program.

This three week multimedia program was tried in six schools with about 300 pupils in the junior and senior high levels. Evaluation was mixed. Pupil learning as measured by pre-and post-testing was significantly high as was pupil evaluation. Teacher evaluation was guarded. Parent evaluation was negative. The cost of this program precludes further use in this District.

9. Volunteer service by pupils and teachers in drug therapy agencies.

During the summer and on Saturdays and in the evening, some teachers and high school pupils do volunteer service. Evaluation is highly favorable.

10. Drug Abuse Advisory Committee.

A committee composed of representatives from the Medical Society, Public Health, city, state and federal law enforcement, probation, PTA, elementary and secondary teachers, and high school pupils, meet monthly to exchange ideas, share reports, evaluate the instructional program for pupils and teachers, and recommend action items to the administration.

11. Youth to Youth Project (YTY).

In at least one senior high a group of interested pupils meet twice weekly after school with a volunteer teacher to plan and carry out projects to utilize peer pressure to discourage drug experimentation by younger pupils in nearby junior high schools and elementary schools. The students are studying the drug scene in depth, including visitations to agencies and are preparing panels and other presentations which they will give to younger children upon the request of the principal. Other ideas YTY would like to develop include a mass saturation program in the mass media and youth groups, and pupil-created instructional aids. One Kiwanis Club has offered to give financial and personal support to this group. Exploration is underway for private financial aid to expand this project into each secondary school and on a citywide level.

12. Drug identification slides.

A set of 24 color slides of contraband drugs and drug paraphanalia has been made with the cooperation of the Bureau of Narcotics and Dangerous Drugs. One set of these slides is consigned to each school.

13. School site drug committees.

Each secondary school is setting up a subcommittee on drug abuse within the existing structure of the School Site Committee of parents, pupils, teachers and community representatives. The purpose of this committee is to study and act upon the drug-related problems unique to its school.

Summary

A sequential classroom instruction program is being implemented in each school in each of the grades, K through 12. Responsibility is assigned to the classroom teacher in the elementary schools and to the teachers of certain designated courses in the secondary school: health, science, social studies and family life education. An instructional package of sample lessons plans is available for each grade and/or subject. Teacher education and classroom instruction focus on drugs as one of many problems young people face as they grow up. Teachers are helped to understand that many responsible young people view the drug scene and the world quite differently than do most adults. Facts and expert opinions are compared with myths and folklore, and motivations and value systems are explored.

Several innovative teaching methods and projects are under development and in trial operation now. These activities emphasize the direct participation of children and youth as respected members of the teaching-learning team, rather than as passive recipients of solely "over 30" ideas which too often are rejected by the adolescent because of the generation and credibility gaps.

We feel there is need for a task force on each level, federal, state, city and neighborhood, through which all efforts can be coordinated and by means of which the drug problem, as one phase of the youth scene, can be attacked cooperatively. The most important members of such a task force may well be representatives of the majority of our youth, responsible young people who are willing to try to make the world a better place for all human beings.

Prepared by:

Frances Todd, Ed.D.
Supervisor, Health & Family
Life Education
San Francisco Unified School District
October 21, 1969

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

DRUGS AND HAZARDOUS SUBSTANCES

Outline of Instruction, 1969 - 1970

GRADE K	Helping parents keep the family well
GRADE 1	Advertising as an unreliable source of health information Personal safety precautions Protecting younger children
GRADE 2	Familiar people who protect health Safe use and storage of medicines Helping parents keep younger children safe and well
Grade 3	Hazardous household chemicals Caffeine in common beverages Over-the-counter drugs Cigarettes and breathing efficiency Alcohol: industrial and ceremonial uses
GRADE 4	Common drugs and hazardous substances Smoking and health Drinking: motivations; alcohol as a depressant drug
GRADE 5	Safe use of household and garden chemicals and common drugs Decision making Stimulant and depressant drugs: use and misuse Pressures to experiment with smoking and drinking Marijuana Laws about drugs
GRADE 6	Motivations for drug misuse and abuse Synergistic action of some drugs Legal controls: local, state, national, international Effects of certain hazardous substances: volatile chemicals, over-the-counter and prescription drugs, nicotine, alcohol, marijuana, and other reality-altering drugs
GRADE 7 Health Education	Pressures to experiment with drugs Legitimate and illegitimate uses of drugs Safe use and storage of household drugs Marijuana

GRADE 8 Science	Physiologic and psychologic effects of drugs on the human nervous, circulatory and respiratory systems: alcohol, nicotine and tars, hallucinogens Motivations for experimenting with drugs
GRADE 9 Social studies	Cultural and ethnic patterns of self-medication Narcotic dependency Social and economic aspects of drug misuse and abuse Community efforts to treat and rehabilitate drug dependents Legal controls: local, state, national, international Personal and social responsibilities
GRADE 10 Family Life Education	Immediate and long-range effects of drugs and hazardous substances Decision making Drug dependency Personal, family and community responsibilities Personal and social motivation Prevention, treatment, rehabilitation Community resources Legal controls
GRADE 11 Health Education	Modern drugs used in treating and preventing illness Drug misuse and abuse as a contributing cause of chronic and degenerative diseases and disorders
GRADE 12 Civics 2	Drug misuse and abuse as an urban problem Social and economic aspects of drug abuse Community controls: local, state, national, international Personal and social responsibilities

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

Sample Lesson Plans

DRUGS AND HAZARDOUS SUBSTANCES

Grades K-3

For optional trial use, Fall term, 1969

Dr. Robert E. Jenkins
Superintendent of Schools

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

Sample Lesson Plans

DRUGS AND HAZARDOUS SUBSTANCES

Grades K-3

For optional trial use, Fall term, 1969

Prepared by

Gladys Kanary, Raphael Weill School
Henrietta Wilson, Marshall School

Edited By

John Freeman, Balboa High School
Eugene Huber, Teacher-Specialist, Health Education
Dr. Frances Todd, Supervisor, Health Education

Under the direction of

George Canrinus, Coordinator, Health, Physical Education, Recreation
Dr. Raymond Pitts, Assistant Superintendent, Instruction Development
Dr. Donald Rhodes, Assistant Superintendent, Elementary Schools

GRADES K-3

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DRUGS AND HAZARDOUS SUBSTANCES

GRADES K-3

CONCEPT

THE USE OF SUBSTANCES WHICH MODIFY BODY FUNCTIONING, FEELINGS AND BEHAVIOR ARISES FROM A VARIETY OF MOTIVATIONS AND MAY BE BENEFICIAL OR HARMFUL.

Behavioral Objectives

The student

1. identifies some commonly used substances that modify body functioning, feelings and behavior
2. notices that there are differences between prescription drugs, over-the-counter drugs, and dangerous and illegal drugs
3. recognizes that there are differences in family practices and feelings about the use of medications, tobacco, and alcoholic beverages
4. uses drugs and hazardous substances only when given permission to do so by parents or responsible adults.
5. identifies commonly used non-drug substances which may be potentially hazardous if misued.

GRADES K-3

Learning Aids for Pupils

Printed materials	None
A/V Aids	

Grade 3

1. Filmstrip, Go Seek and Hide, 87 frames
   American Academy of Medicine, 1967
   Each copy to be shared by two schools
2. Transparencies, Body Systems Teaching Kit
   Cleveland Health Museum
   Each set to be shared by four schools

Outline

Grade K	Helping parents keep the family well
Grade 1	Advertising as a poor source of health information Personal safety precautions Protecting younger children

Grade 2	Familiar people who protect health Safe use and storage of medicines Helping parents keep younger children safe and well
Grade 3	Hazardous household chemicals Caffeine in common beverages Over-the-counter drugs Cigarettes and breathing efficiency Alcohol: industrial and ceremonial uses

KINDERGARTEN

Objectives

To help pupils

1. establish the habit of asking parents or other responsible adults before eating or drinking anything new
2. become aware that some everyday items may be harmful if used improperly.

Lesson 1

Concept

Children should ask parents before eating, drinking or using unfamiliar products.

Learning opportunities

1. GAME: "WE ASK FIRST"

Object of Game: To show that some things are safe to put in one's mouth, while others may be harmful. We cannot always know. Therefore, before we eat or drink anything, we ask a grownup whether we may do so.

Procedure: A hat box is set on a low table beside an empty waste basket. On the hat box is pasted a picture of a large mouth, with lips parted, an 8-inch slot cut between the lips. A picture of equal size, of two lips, closed and buttoned (with real or cardboard button) is attached to waste basket. Under the open mouth "Safe to Eat" is printed; under the closed lips, "Not Safe to Eat."

During work period, children are supplied with pages from magazines which contain illustrations of food, drinks, spray, and cleaners.

Mimeographed or duplicated drawings of such products may be substituted. Supply blunt scissors with which to cut them out. One child, chosen to play the role of "Mother" or "Father" stands beside the exhibits and chooses another child to begin the game. As each child's turn comes, he stands up and shows the picture he has cut out. He explains his picture and tells why he thinks it is safe to put in his mouth, or why it is not. There may follow some discussion of this. He then turns to the child chosen to play the mother or father and asks, "Mother, may I eat this?" If "Mother" says, "Yes, it is safe," he slips his picture between the lips on the hat box and sits down. Meanwhile, the remaining children chant the following song to the tune of "Three Blind Mice":

"We ask first,
We ask first
What we may taste,
What we may taste,
Even though goodies look ever so good
We have to remember as wise children should
Not to put anything into our mouths
Till we ask first."

If the answer by the "Mother" is "No, it is not safe for you to eat," the child whose turn it is puts his picture in the waste basket. If "Mother" has difficulty in deciding, or makes a mistake, the children in the group will usually speak up and correct her; if not, the teacher will supply the correct answer. After each child deposits his picture in either the safe or unsafe depository, the group repeats the song, "We ask first." At the end of the game the teacher may take materials from each depository and review them:

"This is milk. We decided that we can put this in our mouths because—"
Children: "It is safe to drink."
"This is an apple. We decided that we can put this in our mouths because—"
Children: "It is safe to eat."
"This is a cake of soap. We decided that we couldn't put this into our mouths because—"
Children: "It is not safe to eat."

Alternatively, the teacher may line all of the foodstuffs the children have approved for safe eating on a ledge and remark, "We"ve decided that we may eat all of these things because—"
Children: "They are safe."
Teacher: "Are they always safe?—"
Discussion may bring out that someone may have put something other than a soft drink in the pop bottle, or other than milk in the milk carton.
Teacher: "So, what do we do?"
Children chant: "We ask first."

2. DRAMATIC PLAY - THE DAY THE BABY GOT SICK

Purpose: To impress children with the fact that only adults should administer medicine.

Procedure: Teacher reads the story to the pupils. Then they act out the parts. Choose different children to play in each episode. Pantomine may be used without props; however, such simple objects as a toy telephone, bottle, or spoon may be used.

A. Dennis has a little sister named Prue. One day Prue got sick. Mother took her temperature. Then Mother went to phone the doctor.

B. The doctor came to see Prue. He said Prue must have some medicine. He wrote out a prescription.

C. Dennis went with his father to the drug store to have the prescription filled. His father gave the prescription to the pharmacist. The pharmacist read the prescription. Then he mixed the medicine in a dish and poured it into a bottle.

D. "This medicine is meant for Prue," the druggist said. "It was made just for her to make her well. It is not good for anyone else. It might even make another child sick." "I won't touch it," Dennis promised. "You must never touch any medicine, even if it was mixed especially for you, unless Mother or Father are with you," the druggist said. Then the druggist put a label on the bottle to tell just how much medicine Prue should take, and when she should take it.

E. When Dennis and his father reached home, Mother looked at the bottle of medicine very carefully before she opened it. "I must be careful to give Prue just the amount it says on the label," Mother said. "Will you get me a clean teaspoon, Dennis?"

F. Dennis gave his mother a clean teaspoon. She measured the medicine and gave it to Prue. Prue made a face but she swallowed it because she knew it would make her well.

G. Mother looked at the clock. "The label says I should give Prue some more medicine in one hour. It is two o'clock now." She held up two fingers. "When will it be time to give Prue her medicine again?" Dennis held up three fingers. "At three o'clock," he said. "I will watch the clock and tell you. May I put the medicine away?" "No," said Mother. "It is good of you to offer but children should never touch medicine. I will put it in the medicine cabinet where it belongs and lock it up until we need it again." And she did.

H. At three o'clock Dennis called Mother and she took the medicine out of the cabinet and gave Prue another spoonful. Just then the telephone rang. Mother heard the phone but didn't pay any attention to it. Instead, she put the medicine in the cabinet and locked it up before answering. "It is most important to put the medicine away before answering the phone," she said. "Dennis, would you answer the phone for me?" Dennis answered the phone, saying "Mother will come in a minute; she is putting the medicine away."
As soon as Prue was well, Mother took her medicine and poured what was left of it into the toilet. Then she flushed the bowl, washed the bottle carefully, and put it in the trash can. "Why did you do that?" asked Dennis. "There was some left. I could have used it if I got sick." "Oh, no," said Mother. "You would have your own medicine if you got sick. It is not safe for one person to take another person's medicine." Then she hugged Dennis. "But we hope you'll never be sick," she said. Dennis hoped so, too.

3. INDIVIDUAL SAFETY SCRAPBOOK

Purpose: To impress the small child with the need to ask first before tasting any doubtful substance.

Procedure: Provide each child with four sheets of newsprint about 16" x 20" in size. Kindergarten teachers will probably wish to fold these sheets in half and staple or sew them together to form a scrapbook before distributing to children. Older children may wish to do this themselves. Captions,may be printed by the teacher before the material is distributed, or printed on duplicating paper for children to cut out and paste into scrapbooks under the teacher's supervision.

Sample

Cover page: _______________'s Safety Book.
This is _______________.
First page: When I want something to eat
I ask mother.
Second page: Some things are safe to eat or drink.
Third page: Some things are not safe to eat or drink.
Fourth page: So I ask first.
Fifth page: Lock up unsafe things.
Sixth page: Help keep baby safe.
Seventh page: Safe? Not safe?
Eighth page: Protect Your Family Against Poisoning.

Appropriate pictures clipped from women's and home magazines can be used in preparing the scrapbook, or the drawing in the last section of this Guide may be duplicated and used. Each child should be supplied with a picture of "mother," clipped from a women's magazine: one to three pictures of "safe" foods; one or more pictures of liquids or solids "not safe" to eat or drink, and a picture of a baby or toddler. Children may cut out these pictures and paste in appropriate places. On the page containing the caption "So I ask first," the child is directed to draw a picture of himself asking mother or another adult for something to eat. On the front cover, he draws a picture of himself. A paper bag "Medicine cabinet" may be pasted on the page marked, "Lock up Unsafe Things." Discussion should precede this work. Keep in mind that children cannot discriminate when it comes to grades or conditions of safety. While words, "Might not be safe" may be used in discussion, pictures used must be in the "Safe" or "Not Safe" categories.

Evaluation

When booklets are finished (this activity may take several days), direct them to take their scrapbooks home to their parents for comment and evaluation.

GRADE 1

Objectives

To help pupils

1. become aware that TV and radio commercials are intended to sell products rather than give reliable advice about healthful practices
2. recognize some ways in which advertising may be misleading
3. understand that guidance from parents, teachers and other responsible adults about foods and drugs is superior to that disseminated by advertising
4. refuse to take gifts of any kind from strangers
5. protect younger children from harm caused by putting objects in their mouths.

Lesson 1

Concepts

1. Some highly advertised food and drug products are good for children, some are not especially good, but are not harmful to children, and some may be harmful.
2. Children should eat or drink only products which are approved by their parents.

Learning opportunities

1. Teacher may begin this unit with a statement such as, "Most of you watch television at home - perhaps regularly." Follow this with the question, "How many watch commercials?" Attempt to lead the children into a discussion of commercials through such questions as:
    "Why do you watch commercials?"
    "Do you ever buy things advertised in commercials?"
    "Why do we have commercials?"
    "What do commercials tell us?"
    "Are commercials always true?"
    "Can commercials be really untrue?"

Lesson 2

Concepts

1. Although most people like children, a few grown-ups may harm children.
2. A child should not accept gifts, money, candy, pills or other medicines, or rides from a stranger.

3. Children should tell parents or other responsible adults immediately if approached by a stranger who offers them gifts or favors.

Learning opportunities

1. Discuss with the children several ways they might respond to a stranger who tries to strike up an acquaintanceship.

   A. Discuss what to do if a stranger offers a ride, candy, money or gifts.

   B. Discuss rules for behavior when walking to and from school, at school and on the playground.

   C. Discuss with children the types of people who will help them to be safe and practice safe habits. Parents, teachers, policemen, firemen, older brothers and sisters are examples of safety helpers.

   D. Help the children make a class list to be sent home of the general safety rules regarding strangers, which might include:

      (a) Never talk to a stranger or never accept offers of toys or candy except when parent or teacher is present and approves.

      (b) Don't go any place with strangers unless a parent or teacher is present. If someone says he has been sent by mother or father to pick you up, don't go. Tell the teacher, a policeman, or the playground supervisor.

      (c) Never accept a ride with a stranger in a car.

      (d) Don't play in dark alleys, deserted buildings, in secluded areas of parks, or around public restrooms.

      (e) Never let a stranger touch you or handle your clothing.

      (f) If a stranger does touch you or hurt you, try to get the license number of his car. If you have nothing to write with, use a stick to scratch the number in the dirt, or a small rock to scratch it in the sidewalk if no pencil is handy.

2. Focus on commercials related to "health" - foods, medicines, etc. (Teacher should be aware of and know content of some specific commercials to use as illustrations.)

   Emphasize that commercials try to attract your attention so you'll remember a particular brand. Ask students to pay particular attention to commercials for a few days. Through "role playing," allow children in pairs or small groups to dramatize a commercial they have seen.

3. Have students help you make a list of products advertised on television which are related to health. (Teacher should have a prepared list to work from.) Copy list on chalk board or butcher paper. Ask students to bring boxes, cans, labels, etc. from these products to school. To help students decide which are good, which are not especially good but not harmful, and which may be harmful, discuss the uses of the products in the proper category and create a display in the classroom.

4. Discuss one or more of the TV commercials aimed at selling candy, cookies, or other foods of high sugar content to children. Attempt to discover if the commercials in any way say these things are good foods for them to eat. Have the students give reasons why they might not be good for them.
   Place a candy bar or a bag of candy, some sweet cookies, an apple, and an orange on a table before class. Ask the children which they would prefer and why. Ask other children to tell which is best and why. Emphasize the effects on teeth and appetite.
   Encourage fruit over candy.
   Encourage candy after meals rather than before.

5. Of the products in the display, have the pupils help select those which are medications or remedies for common illnesses. Point out: (a) that children should take medications only when requested to do so by parents or members of the health profession; (b) medicines which are all right for grown-ups to take may be harmful to children.

6. Try the "Finger Play" idea:

FINGER PLAYS

Object of Play: To teach children to recognize responsibilities for safeguarding the small and helpless child from danger of ingestion of harmful materials, including poison.

Procedure:
- A. Show picture of crawling baby examining toy or object on floor.
- B. Discuss how baby crawls around the room playing and exploring, often picking objects and putting them into his mouth.
- C. Help children recognize that putting objects into their mouths is a normal way for babies to learn, but that we outgrow this habit when we are older and know better.
- D. Discuss how this normal habit can sometimes be harmful to the baby.
- E. Lead children to discuss how they can help protect the baby, and keep him from touching or tasting objects which may be harmful.
- F. Discuss ways children can help make baby's environment safer by keeping harmful things out of baby's reach and sight.

Activity: Children may enjoy learning one or both of the following rhymes, making motions with their fingers to illustrate:

A. One, two, three, four, five,
six, seven, eight, nine, ten--
These are the sweet little fingers
That get into trouble when
Baby finds a new plaything
on table, shelf, or floor,
Then puts it quickly in his mouth
And looks around for more.

B. Ten little curious fingers
Ten little curious toes
Taking our baby to places
He can't wait to explore.
We must try to teach baby
Never to touch or taste
Things that he finds around him
On table, shelf, or floor.

Evaluation

1. Make an A,B,C Booklet with illustrations of people to whom a child can turn for help in case he is bothered by a stranger.
2. Role-play a situation in which a child refuses a ride or treat from a stranger.
3. Make up a skit about how radio and TV commercials exaggerate or give only partial truths about certain products with which the children are familiar.
4. Prepare and present a skit, "When Someone Tells You to Jump off a Bridge, Do You?" (As related to advertising or to behavior when encountering stranger)
5. Prepare and present a skit, "Don't Believe Everything You Hear or See" (as related to advertising claims)

GRADE 2

Objectives

To help pupils

1. become aware of adults in the community, other than parents and teachers, who are interested in keeping children well

2. understand that it takes many years of study and experience to become qualified to prescribe and/or administer certain drugs

3. be aware that medicines should be stored safely and used only for the purpose for which they are intended

Lesson 1

Concepts

1. The protection of our foods and drugs is the work of many people.

2. If our foods were not safe, many people would be sick.

3. Some adults are health specialists.

Learning opportunities

1. Begin this unit by attempting to establish just how much children know about the sources of most of our food. The teacher should be able to get a variety of answers to questions like:
   (a) Where does our milk come form?
   (b) Why do we receive some of our food in cans?
   (c) Where do we get our meat?

2. If it is possible to do so, arrange a field trip to a dairy, a creamery, a bakery, or some other local agency connected with food processing and distribution. Try to choose an experience that will illustrate the idea that the company either receives their raw materials from another locality, or that they in turn send their products to another processor before they are received by the consumer. Emphasize the idea of safety in food production and the necessity of retaining natural food values during processing.

3. If a field trip is not advisable, choose a film that will illustrate some of the same points. Emphasize responsibilities of government, food handlers, and food preparers in homes.

4. Have each student bring some form of food container which illustrates or indicates (by label) a way of keeping food safe or insuring its food value. Encourage students to have their mother or father explain this to them. Labels such as store in a cool dry place, no refrigeration necessary, or artificial preservatives added are examples. Make an exhibit of these, encouraging students to explain to one another.

5. Invite a supermarket manager to speak to students, (father of a student, if possible) explaining how stores keep food safe to eat. Ask students to discuss how foods are kept safe at home.

6. Alternatively, use a film emphasizing safe production of a single food, e.g., milk.

7. With the help of students, prepare a list of professional people who work to help us stay healthy, (doctors, nurses, dentists, etc.). Ditto the list and distribute to each student. Ask each student to find out more about the job of each one by talking to his parents, friends, or neighbors.

8. Assign some pupils to read on these professions and report to the class.

9. Ask each student to write or tell a short story about the profession in which they are interested.

10. Develop a class scrapbook or bulletin board, or mobile, using pictures of these health workers at work (from magazines, newspapers, etc.).

11. Discuss which of the health professionals may prescribe medications, and which can only administer them. Why the difference? How does the pharmacist help the doctor? How does the nurse help the doctor?

12. Assist the pupils in developing simple descriptions in children's terms of each of several health professionals, e.g.:

    (a) Medical Doctors (mostly men but some women) are people who go to school so they will know about all kinds of sicknesses and what to do to make people well again.

    (b) Nurses (mostly women but a few men) are trained to help doctors; they don't know as much about helping sick or hurt people as doctors, but they probably know more than anybody other than doctors.

    (c) Dentists (mostly men) are trained to examine your teeth and know when they need some kind of treatment.

(d) Dental Hygienists (mostly women) know how to clean your teeth and can show you how to keep them clean yourself.

(e) Pharmacists (mostly men) work in drug stores and know how to prepare medicine which doctors precribe for their patients.

13. Consult the health textbook teacher's edition, Unit 1, for additional suggestions.

Lesson 2

Concepts

1. It takes many years of schooling to become a health professional.
2. Some health professionals are allowed to prescribe drugs and others are not.

Learning opportunities

1. Read with the children, or assign reading in children's books which describe some of the health professions.
2. Have the children make posters or other visuals which describe the roles and training of these health professionals.
3. Write a composition which describes the work and training of these health professionals. Some examples:

   (a) Medical doctors go through elementary school and high school, then go four years to college and four or five more years to medical school. Then they are doctors, but they still have to take at least one more year of training in a hospital; some take four or five more years. This gives them many chances to treat people who are sick with many kinds of diseases and injuries and to learn from older doctors who have more experience. All of this practice helps them to decide what is best to help a sick or hurt person get well.

   (b) Nurses work with doctors in hospitals and in clinics and doctors' offices. In schools a nurse may work by herself, but there is always some doctor she can call if she needs help.

   (c) Pharmacists know a lot about medicines but they are not trained to decide which is best for a sick person. This is where the doctor and pharmacist work together.

The doctor decides what medicine to give; he writes it on a piece of paper called a "prescription" and the pharmacist in the drug store reads it and puts the right medicine in a bottle or jar for you, and gives you a copy of how the doctor wants you to take the medicine.

4. Discuss the potential helpful and harmful uses of medications familiar to most of the children and help them relate this to the reasons that only doctors can prescribe certain drugs.

Lesson 3

Concepts

1. Medicines are useful, helpful drugs if taken as directed and with professional or parental supervision.
2. The pharmacist and your doctor work together to provide specifically tailored medicines for each individual. These should not be used by any other individual.
3. At the termination of each illness, all medicine should be disposed of to prevent misuse.

Learning opportunities

1. Arrange a field trip to a drug store in the neighborhood.
2. Ask the druggist to explain precautions in using and storing drugs, and to show the children how certain drugs are kept under refrigeration, locked up, or restricted to purchasers; also how he safeguards prescriptions.
3. Upon returning to school, write a class thank-you letter to the druggist.
4. Discuss what drugs were displayed in the drugstore which the children recognize as being in their homes.
5. Read Unit 2, p. 30, of the Health text.
6. Compose a check-list to follow regarding safe storage of medicines at home.
7. Send the list home to parents with a letter the children have composed urging parents to discuss the check-list and make suggestions for its improvement.

Evaluation

1. Using empty, labeled drug containers make a display which illustrates safe use and storage of drugs.

2. Make a collage or mural illustrating the work of the health specialist you have studied.

3. Develop songs or poems about "health helpers."

4. Adapt the following activities, taken from the FDA publication, Teaching Poison Prevention in the Kindergartens and Primary Grades:

    a. Interviews with Community Helpers

    b. Excursions

    c. Discussion

INTERVIEWS WITH COMMUNITY HELPERS

Neighborhood Mother
Nursery School Teacher
School or Public Health Nurse
School Doctor
Sanitary Inspector
Pediatrician
Pharmacist
Grocer
Health Officer

Purpose:

1. When children interview specialists in fields to which they can relate, the interest of the children is stimulated. They are also provided the experience of conversing with adults on topics of mutual concern. Such interviews improve the skill of the child in talking and analyzing. This is also a means to develop understanding and appreciation of the provisions made for their welfare, even though these provisions may impose restrictions.

2. The chief purpose of such interviews, from the child's point of view, is to learn more about how to protect himself and his younger brothers and sisters from accidental poisoning.

3. The child also will want to know about the specialist's work, his training, and how both contribute to the public welfare.

Procedure:

If a school doctor or nurse is available on the school premises, he or she may be invited to talk to the class on problems brought up by the children's study of accidental poisoning. Often a parent in one of these professions will consent to visit the class, or will invite a small group to his office to interview him there.

Interviews with the pharmacist or other local businessmen may be arranged at their places of work. When it is not desirable to transport a class, arrangements may be made for a small committee to interview a community worker and report back to the class. Before the interview, children should prepare questions they would like to ask the expert in order to save time.

The adult to be interviewed will also require briefing which should include: the purpose of the interview; the questions which may be expected; the attention span of the children, and the type of information they can absorb at their level of development. A single message, such as "Always Ask First," is more effective than information too advanced for children to absorb.

Suggested Activities:

1. Write letters requesting the interviews. Follow up with a letter thanking the interviewer for his time.
2. Plan and list questions to be asked during the interview.
3. Write a report on the interview for the school paper, to take home to the parents, and for the class record.
4. Dramatize the work of the community worker through play activities, dramatic presentations, and flannelboard stories.
5. Prepare "movies," exhibits, murals and picture displays.
6. Give oral reports to other classes.
7. Read about community workers in textbooks or library books and relate what children have learned about accidental poisoning to problems involved in their work.

EXCURSIONS

To the Drug Store

Purpose and Procedure:

An excursion to the drug store to meet the pharmacist may be profitable. On such a field trip, children often discover that a drug store, although equipped to sell many things, does specialize in medicine. These are stored in the pharmacy, away from other products. The specially-trained pharmacist not only stores medicines, but prepares prescriptions.

The children should be shown that special drugs are kept behind the counter, out of reach so that only an authorized person or pharmacist may touch them. This should graphically illustrate the manner in which medicines should be stored at home—out of reach, and preferably locked up.

Understandings to be Developed Through Discussion:

1. A pharmacist has a very responsible job which requires special training. It is his duty to prepare medicines prescribed by doctors. If medicine is individually prepared, the pharmacist must have a prescription from the doctor before he can sell that person such medicine.

2. People don't always need medicine when they are sick. Sometimes they need only rest and special food. The doctor is the only one to prescribe certain medicine and the drug store is the proper place to take the prescription and purchase the drugs.

3. It is very important to take only as much medicine as the doctor prescribes. If we take more than we need, or someone else's medicine, it may make us sick instead of well.

4. All medicines have labels attached to them which give directions for their use. These labels should be read carefully. The medicine should be taken only as directed. Be sure that all containers are properly labeled and the labels are legible.

5. Medicines are dangerous if used incorrectly. For this reason many of them bear special labels of warning. Some, such as iodine, carry a picture of skull and crossbones and the word "POISON." This does not mean that other medicines are harmless, because all drugs maybe potentially hazardous if they are not used correctly.

6. Children should never self-administer medicine, nor give any to other children. They should receive medicine only from a responsible adult they know and trust.

7. Medicine is not a food or drink. Pills are not candy. Cough syrups are not like breakfast syrup. Drugs should only be taken as prescribed and only in exact amounts.

Follow-up Activity:

After a visit to a drug store, children may enjoy building a play pharmacy in the schoolroom from blocks or orange crates. The local pharmacist may be able to furnish some empty plastic pill bottles or medicine bottles for the children to use. It is unwise to ask very young children to bring old medicine bottles or boxes from their home since their enthusiasm may impel them to acquire unwashed or partially-filled containers. "Pills" can be made from putty, plasticine, or clay, and liquid medicine from water colored with harmless vegetable dyes. Paper labels, such as "Keep Out of Reach of Children," can usually be purchased at dime or stationery stores. Labels also may be made by the children on file tab paper. Attaching pre-glued labels to bottles will stimulate an immediate lesson, for the average child will instinctively start to lick the label in order to attach it. A quick "Wait! We don't put anything into our mouths until 'we ask first'" should follow. The teacher may demonstrate how a sponge or brush may be used to attach labels without using tongue or finger. Point out, "It is not likely that glue on the back of such a label will seriously hurt anyone, but it is not a sanitary thing to do. It's best to attach a label or stamp by wetting by some means other than the tongue."

"Prescriptions" may be made by the children from ordinary paper.

A play telephone might be a useful prop in this "pharmacy," because the children will have observed the telephone as an important tool for the pharmacist.

DISCUSSION: HELPING PROTECT BABY

Purpose:

To develop in children a sense of responsibility to protect those younger than themselves from accidental poisoning.

Supplies Needed:

1. Doll.
2. Two-shelf bookcase (may be orange crate).
3. Cabinet with door (may be orange crate with door drawn on wrapping paper of a large cardboard box).
4. Cut-out pictures of foods, household cleaners, pill bottles, medicine bottles, powders and liquids familiar to children. These may be cut from magazines and mounted, or drawn on mimeograph or duplicating sheets. Note: While real objects may be used, the teacher should remember that there is always the possibility that this will encourage investigations of such objects in the home.
5. Lock and key.
6. Paper grocery bags around 5" x 8".

Sample Procedure:

Teacher:	How many of you have little brothers and sisters?
Children:	Show of hands.
Teacher:	Oh, I see; a good many! Who would like to tell us about his? (Selects one child who is allowed to talk momentarily.) Can he walk? Does Mother ever ask you to help take care of him? Is it easy to take care of him? Do you know what

to do? What do you do? (Questions should be asked of other children as well as the first selected.) (Then, to group):

I can see that you know a great deal about taking care of your brothers and sisters. You love them very much, and want to keep them safe, don't you? When we keep someone safe from harm, we "protect" them. Would you like to learn something new that you can do to protect your brothers and sisters? Something even your mother and father may want to know more about? If you learn something new about how to protect little brothers and sisters, do you think you could tell your parents all about it, so they'll know more about how to protect them, too?

Nods from Children.

Teacher: Very well, we'll learn something important today that will help everyone in your family take better care of each other, especially little brothers and sisters. Then you'll go home and tell your mother and father about it. That will make you feel like a teacher, won't it? That's what I'd like for you to be today--teachers. Teachers for your little brothers and sisters, and for your mother and father, too. Do think you could do that?

All right, let's see how we can begin.
(Teacher takes doll out.)
Here's a doll we've never had at school before. We're going to pretend that she's your little sister. She doesn't have a name! What do you think we should call her?

Children make suggestions, and a name is finally chosen.

Teacher: Then "______" shall be her name. She is two years old, and she can talk a little. (Squeeze doll so she'll "ma-ma.") And she can walk a lot. (Make doll walk.) She likes to know about everything. She likes to feel things. Show how she feels things.

Children make feeling motion.

Teacher: She likes to open things. (Push doll's hand into some nearby object--maybe desk.) She likes to pull things down and knock things over.
(Demonstrate with books or other objects nearby.) Is this the way your little sister or brother does?

Children agree.

Teacher: Of course, it is. That's the way little children behave when they're two years old. Do you remember when you were little and just two years old? You did things like that, didn't you? She likes to taste things, too. Show how she tastes things.

Children make motions of eating.

Teacher: What kinds of things do you think_____likes to taste?

Children will probably respond with "candy," "milk," "cake," and "baby food." The teacher may repeat some of these.

Teacher: Yes, these foods taste good. Do you think they're good for her? Why not? (Listen to various answers and comment.) Sometimes _____puts things into her mouth that are not good for her. What are some of these things? Could any of them harm her? (Listen and comment. Then present mounted pictures or actual products mentioned above. These might include bread, milk, cake, baby food, nails, marbles, cleaner, spray, moth balls, etc.) Here are some things _____sees and wants to put into her mouth. Which ones do you think are safe for her to eat? Which ones are not safe for her to eat? Will any of them make her sick if she eats them? (Listen to comments.) Do you think she knows which of the items she tries to eat are not safe and which make her sick? Why not?

Children will eventually arrive at answer--She's too young.

Teacher: That's right; she's too young, or little, to understand that some things are not safe to eat and should never go into our mouths. Do you think that if you explained to her, she would understand and do what you tell her?

Children may disagree, but will eventually arrive at "No" for answer.

Teacher: Suppose she is too young to understand what things are not safe for her to put in her mouth. Then how can you and mother and father keep her from being harmed by such things. How can you protect her?

Children will arrive at answer: Don't let her have them; don't let her touch them.

Teacher: But she will touch them if you or mother and father leave them where she can reach them, won't she?

Children agree.

Teacher: Then what can you and mother and father do to keep her from touching them? How can you protect her?

Children will eventually arrive at answer: Keep them out of her reach.

Teacher: That's right; you can keep unsafe things out of her reach. Where do you think you could keep them so that she wouldn't touch them?

Children will eventually arrive at "high shelf," medicine chest," etc.

Teacher: But couldn't ______ climb up there? Look! Here's a high shelf, and here's a medicine cabinet. See how she climbs. She's trying to reach the shelf; now she's trying to open the door of the cabinet. Why can't she get the door open?

Children: Because it's locked.

Teacher: "That's a good idea--we should lock unsafe things away from her. We put these things which ______ might taste but which are not good for her in the cabinet and locked the door. Now, let's unlock the door. I have a key right here." Then the teacher may wish to examine each of the objects one by one, explaining why each was in the cabinet with the unsafe things. "Now let's close the door tightly. Who would like to lock the door in order to keep ______ from getting the unsafe things?" (Choose child to pretend to place lock on door if actual cabinet with lock has not been used; if key is available, have him actually lock.) "That was a very good idea. We locked the things which are not safe, and again kept them out of ______'s reach. Now I'm going to give each of you some pictures of things ______ might like to taste. Here's a little bag for each of you which you may pretend is a cabinet." Distribute pictures or empty containers of potentially unsafe drugs as well as relatively safe items.

Discussion might proceed along these lines, adapted to materials used. Look at the things you have. Put all the ones that ______ shouldn't taste in your "cabinet." You may leave the others out. .When you've put all of the things ______ shouldn't taste in your "cabinet," hold up your hand. Now, let's pretend we're locking the cabinet door." (Show children how to make a "paper lock" at top of bag.) "Does everyone have his cabinet locked? Let's see if we have all of the unsafe things in our cabinets. (Discuss as you go along.) Is soap safe to eat? Safe to put in our mouths? Is glue safe to put in our mouths or to breath and inhale? Of course, none of these things should go into our mouths. Are pills safe? But we should never taste them unless mother or father or doctor or nurse gives them to us. Not even if we know they were meant expecially for us. Does anyone know why this is so?"

GRADE 3

Objectives

To help pupils

1. recognize, avoid, or use with caution certain hazardous chemicals found in their homes
2. become aware that accidents can result from the misuse of medicines
3. aid parents in protecting younger children in the family from harm
4. recognize some common beverges which can be harmful if misused
5. understand why children should not experiment with cigarettes and alcoholic beverages.

Lesson 1

Concepts

1. Many substances in every home are helpful if used properly but may be harmful if misued.
2. A third grader can help his parents protect younger family members from harm from the accidental misuse of many items found in most homes.

Learning opportunties

1. Introduce and show the FS, Go Seek and Hide. Consult the illustrated script which accompanies the filmstrip for suggestions for follow up activities.
2. Assign individuals or committees to prepare a series of visuals (posters, transparencies, displays) which illustrate the products mentioned in the filmstrip.
3. Have each pupil who has younger siblings suggest ways to help parents protect them from accidental poisoning.
4. Discuss the purpose and activities in the community for "Poison Prevention Week" which is usually the third week in March.

Lesson 2

Concepts

1. When medications are used, the directions on the label or those given by the doctor, should be carefully followed.

2. Mild to serious illness, or even death, can result from carelessness in the use of drugs.

Learning opportunities

1. The teacher should procure empty, labelled drug containers for a class display.

2. Use opaque projector, or make a transparency, of typical directions and cautions on the labels.

3. Discuss and make a class list of conditions under which a person might become ill, accidentally, by the misuse of medications. Some of these are:

   a. not reading the label

   b. taking medicines in the dark

   c. accepting pills and candy-like medicines from strangers and older boys and girls who dare younger children to try potentially hazardous substances

   d. using another person's medicine

   e. taking more than the prescribed dose

   f. taking medicine from an unlabelled container

4. Make a class list of "How to take medicine--if you have to."

Lesson 3

Concepts

1. Some substances which are commonly used can be harmful if misued or taken in excessive amounts.

2. Children should use cola drinks, tea and coffee only with parent's permission and only in limited quantities.

3. Children should take medication only if directed to do so by parents or health professionals.

Learning opportunities

1. Assign reading in the appropriate sections of the health textbook.

2. Assign or ask for volunteers to find out the drug (Caffeine) content in a typical serving of coffee, tea, chocolate beverage, and cola drinks.

3. Differentiate between drugs which temporarily speed up physical and mental functions and those which slow them down. Classify caffeine. Discuss:

    a. Do children need stimulants?

    b. Why overuse of caffeine-containing substances is potentially harmful to children.

4. Ask children to identify drugs and drug-like substances they take occasionally or routinely, such as aspirin and vitamins. Discuss aspirin as the chief cause of accidental poisoning in children.

5. Procure empty containers of children's aspirin and adult-dosage aspirin. Read labels aloud, or project them. Discuss reasons for different strengths of the same drug in relation to body size and amount of fluids available in the body for delution.

6. Discuss alternatives to taking aspirin for headaches.

7. Discuss alternatives to taking vitamins (unless a doctor prescribes them).

8. Discuss alternatives to taking cola and other soft drinks to quench thirst.

Lesson 4

Concepts

1. Cigarette smoking diminishes the intake of oxygen and thus diminishes breathing efficiency.

2. Alcoholic beverages contain a depressant drug, alcohol.

Learning opportunities

1. During the study of the respiratory system, point out how the oxygen intake is diminished when a person smokes. Discuss with the class the relation between oxygen intake and utilization and proficiency in sports and physical games.

2. Briefly and simply explain how modern science has uncovered evidence that indicts cigarette smoking as a serious health hazard, a scientific fact that was not known when today's adults were children.

3. Discuss why a few third graders and some older children may be tempted to experiment with smoking. Point out that habits are much more easily formed than broken. Discuss falsity of "values" that smoking is "grown-up."

4. Discuss the use of alcohol in industry (alcohol is the second most commonly used liquid). What properties does alcohol have, in industry, that water does not have?

5. Discuss the ceremonial, religious and ritual use of alcoholic beverages by grown-ups. As it is used in beverages, what properties does alcohol have that affect the functioning of the body and mind? Why, in families where adults customarily use alcoholic beverages with meals, are children usually forbidden to drink even small quantities of wine or beer?

6. Write a class letter to parents asking them to discuss with their child family beliefs about drinking and smoking. Follow up home discussion with class discussion, stressing the need for each student to respect and comply with parental beliefs. Point out that we must respect the rights of all families respresented in the class to have different beliefs.

Evaluation

1. Prepare and put on a program for parents on one or more of the following themes:

   a. "I can Read." Observing caution and warninginstructions on the labels of household substances which are potentially hazardous.

   b. "Who Needs Vitamin Pills?" The unnecessary use of vitamin pills if daily meals contain the Basic Four Foods. Correlate this unit with the study of nutrition.

   c. "Is Your Home Medicine Cabinet Safe?"

   d. "Children who Smoke Don't Know Any Better."

2. Compile a class list of ways older children can protect younger children from accidental poisoning.

3. Compile a class list or display of common beverages which contain drugs which may be potentially harmful to youngsters if used in large quantities such as cola drinks, coffee, tea. What are better alternative beverages?

4. Prepare a skit around the theme of "If I Don't Start Smoking----."

5. Use the following activities adapted from FDS publication, Teaching Poison Prevention in the Kindergartens and Primary Grades.

   a. Discussion Game, "Just Suppose"
   b. "The Containers Speak," a puppet show
   c. Story telling
   d. Our Medicine Chest and present to a parent's meeting

6. As a culminating activity for the primary grades, have children read the unfinished stories which follow the above activities and write or tell about appropriate endings.

7. Five additional activities for learning and evaluation appear at the end of plans for this grade.

DISCUSSION GAME - "JUST SUPPOSE"

Object:

To develop sound judgment; how to act if confronted with an unsafe situation.

Procedure:

Teacher presents "just suppose" stories, such as the following, and then calls on individual children to tell what they would do. As experience with the game develops, understanding increases. Some children may substitute for the teacher in presenting "just suppose" episodes.

1. Suppose you were playing in your home and you found a box of pills or a bottle or medicine open on the table. What would you do? Tell why.

2. Suppose you found your baby brother or sister playing with a can of cleaning powder. What would you do? Tell why.

3. Suppose someone left a bottle of medicine on the table and forgot it. What would you do? Tell why.

4. Suppose you saw another child accidentally eat or drink something you thought might harm him or make him sick. What would you do? (Always tell parent or teacher)

5. Suppose a playmate offered you something to eat or drink, but you were not sure what it was. What would you do?

6. Suppose you found baby brother or sister chewing on something but he wouldn't open his mouth to let you see what it was, and

there was an open box of pills beside him. What would you think? What would you do? Why?

7. Suppose you were thirsty and you found a pop bottle in the garage where father usually keeps his tools. What would be the best thing to do?

8. Suppose you and your baby brother saw father or mother painting and he or she put some paint in a cup and left it there. What would you do?

THE "CONTAINERS SPEAK" - AN IDEA FOR A PUPPET SHOW

Purpose:

To provide children with a better understanding of the need for caution in handling household supplies of a potentially poisonous nature.

Procedure:

Primary grade children usually enjoy working with hand-puppets or figures mounted on sticks. They are probably familiar with the various television shows for children. These can easily be adapted in developing ideas about poison prevention.

A large cardboard box, mounted on a draped table and furnished with background scenery made from craft paper may be used for the stage. Hand-puppets, made by the children from paper mache or stuffed paper bags with faces drawn on them, may be mounted on sticks.

Planning the dramatizations for their puppet show will give children many opportunities to discuss danger spots in the home and to develop an understanding of the importance of poison prevention. After practice, the show may be presented for the benefit of a younger grade.

The following is an idea for a puppet show using boxes, cans, and bottles instead of figures to develop a dramatization about poison prevention:

The teacher provides the class with a collection of clean, empty cans, bottles, and boxes. These may be original containers for household products which are potentially poisonous, or they may be unlabeled containers on which the children may affix such labels as they wish. (Do not ask children to bring such containers to the classroom; in their eagerness they may be careless in their choice of containers.) These containers may then be mounted on sticks; old broom handles are good. The children may plan a puppet play in which containers play the parts of characters and speak to the audience.

Discussion should bring out the fact that many household products of a potentially poisonous nature are actually very useful, and make living in the home much easier and more pleasant. It is only when they are not used as intended or directed that they become dangerous.

The theme of the play goes something like this: The containers are trying to find a proper home on a shelf, in a high locked cabinet, or elsewhere, out of reach and out of sight of small children. People just won't put them where they belong and then the containers get blamed for the things that happen when people are careless. They discuss some of their experiences resulting from carelessness. They explain that when used properly, they are really very good fellows. They talk about the directions and warnings printed on their labels. Then they point out places where they might be placed for safe keeping and where they, as well as the little children in the household, would be so happy!

Another theme might be "The Safe House and The Careless House."

Follow-up Activity:

When the show using either of these themes is completed, children might distribute a home check list for members of the audience to take home and use in checking placement of potentially poisonous material in their own homes.

STORY TELLING

Purpose:

To stimulate individual thinking and to develop judgment which will assist children in avoidance of potentially dangerous situations in relation to poisoning.

Procedure:

Pictures from magazines can be used effectively to stimulate discussion. Those in color and a full page in size are best. Children "tell a story about the picture" to illustrate the following points:

1. Children should always ask an adult first before tasting anything not served at the table because:
    a. Some things are not safe to swallow.
    b. Materials which are poisonous may have been put into familiar receptacles which ordinarily contain non-poisonous materials, e.g., kerosene in a soft drink bottle.
2. Materials found in the trash should be left strictly alone.

3. School children, like their parents, have an obligation to protect younger children in the family from possible poisoning. They can do this by --

   a. Setting a good example.

   b. Helping to keep potentially dangerous materials out of sight and out of reach of younger boys and girls.

   c. Reminding grown-ups to return potentially dangerous materials to their rightful places, out of reach, and out of sight of little ones.

   d. Being careful never to open bottles or boxes without asking parents first.

   e. Never playing with household cleaners or with medicines or sprays of any kind.

   f. Being careful never to taste anything found in a bottle, dish, cup, or package unless given by parent or teacher.

Progressive story telling is fun, too. Select a story and ask each child to tell one episode.

Other suggested activities to go with this story-telling activity might include:

1. Make scrap books containing pictures, cut-outs, or children's drawings, with captions, on such subjects as:

   a. Using our crayons and paints safely

   b. Our medicine cabinet

   c. Protecting little brothers and sister. (Put these scrapbooks in "Library corner" for all to see.)

2. Make poster on

   a. Where to keep medicine

   b. Where to keep cleaning materials.

OUR MEDICINE CHEST

Object of Game:

- To impress children with need for caution in relation to the family medicine chest.
- To provide information children may share with their parents.

Procedure:

Discuss —

Do you have a medicine chest in your home?
Where is it?
What is it for?
What kinds of things are kept in it?
Who uses the medicine chest? When?
Why do you think it is placed up high?
Can your baby brother or sister reach the medicine chest?
Do you think it would be safe for him to touch anything in the chest? Why, or why not?
If he can reach the chest, how could we keep him out of it?
Can your medicine chest be locked?
Do you think it would be a good idea for mother and father to put a lock on the medicine chest? Why? If you don't have a medicine chest which can be locked, is there a closet in your house where the medicine can be locked up?
What are some good rules to make about a medicine chest?
Can you remember to tell mother and father and your brothers and sisters about these rules?
Would you like to show mother and father what you have learned about the medicine chest?

Activities:

1. One Way to Make a Medicine Cabinet

   a. Sheets torn from magazines which depict medicines and other possible contents of medicine chests or a mimeographed or duplicated sheet of illustrations on same subject.

   b. Duplicated sheets drawn to represent:

      1. medicine chest with shelf space
      2. door to medicine chest; door may be stapled on to cabinet before sheets are distributed to children, or after they have finished their assignment. Silver paper or aluminum foil can be provided for children to paste on door to represent mirror.
      3. lock.

   c. Help children cut out pictures and paste on shelves; check what they have done as they finish; then let them paste lock on the door.

Another Way to Make a Medicine Cabinet

A. Distribute small paper 5" x 10" sacks with picture of medicine cabinet door (with lock) and words, "Safe from Poisoning" drawn on front. (Or children may draw own picture of cabinet from sample shown by teacher.)

B. Distribute sheets of magazine ads or duplicated pictures, showing materials commonly placed in medicine chest.

C. Let children cut out objects which belong in medicine chest and place them in their "chest" (bag).

D. After all children are finished, show them how to "lock" their chest (tear and fold pleat in bag.)

E. Ask children to take "medicine chest" home for mother to see; ask them to talk over what they have learned with their parents.

COMPLETING UNFINISHED STORIES

Purpose:

To develop individual ability to recognize potentially dangerous situations in relation to poisonous substances.

Procedure:

Incomplete short stories, based on poison prevention themes, may be used as the basis for reading, writing, or oral discussions. The children tell the ending, then go to their seats to illustrate the story. The children may be asked to write an ending to the story. Third grade pupils may use the story as a reading lesson if it is duplicated so that each child has his own copy. These children might write an ending, draw illustrations, and combine the three communications forms in a booklet to be kept in the class library for re-reading.
The following are sample stories:

1. Barbara's Baby

One day Barbara's mother said, "I must go to the store. Will you mind the baby?"
"Oh yes," said Barbara. She enjoyed taking care of her little brother. She loved him. She was proud that Mother would trust her to look after him. It made her feel very grown up.
But her little brother was not really a baby. He could crawl very fast even though he couldn't walk or talk yet. He was always getting into things. Barbara had to watch him every minute. He was always putting things into his mouth. He was too young to know better. Barbara played with her brother. After a while he got tired and lay down on the rug and went to sleep. Barbara turned on the TV. She was so interested in the show that she forgot the baby. When she looked around he was gone. She found him in the kitchen. There was something black smeared all over his face. He had something in his mouth. There was a bottle of shoe polish on the floor.

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2. Mike and Jerry

Mike and Jerry were good friends. They often played together. They liked to build things. Sometimes Mike's father let them work in his workshop in the cellar. He taught them how to use the tools there. He taught them to be careful with the tools. He showed them how to paint and how to clean brushes. Sometimes he let them work in the shop alone.

One day after they had worked for a while, Mike said, "I am thirsty. I wish I had a bottle of soda-pop to drink."

"Let's go up to the kitchen and ask my mother for some," Jerry said.

"I see a bottle on that shelf," Mike said. He pointed to a shelf full of paint cans. Sure enough, there was a full soda-pop bottle on the shelf. Mike reached for it. Jerry stopped him.

"Oh, no" Jerry said. "You mustn't drink that!" "Why not?" asked Mike. "I don't think your father will mind."

"That's not the reason," Jerry said. "We don't know if that is soda-pop in the bottle. It's a very queer place for a bottle of soda-pop to be."

3. Grandma Periwinckle

Grandma Periwinckle has not been feeling too well lately. She went to see her doctor. He prescribed some medicine which she took to the pharmacist at the Drug Store. She went back to the pharmacy a few hours later and picked up the pills. She read the label which said, "Take two every four hours." Also printed on the label was "CAUTION: KEEP OUT OF REACH OF CHILDREN." Grandma Periwinckle put the pills in her purse, and went home. Just as she arrived at the door, her little grandson, Jeffrey, came around the corner with his mother. Grandma Periwinckle went into the bedroom where she took off her coat and put it, along with her purse, on the bed. She then returned to the living room to talk to Jeffrey's mother. Usually, Grandma Periwinckle is very careful to keep all her medicines and household products on high shelves because, even though she has no small children of her own, Jeffrey and his friends visit her quite often. She always warns the children never to put anything into their mouths without asking first. But this time she forgot that purses containing medicines should also be put out of children's reach. As she was talking in the living room, little Jeffrey walked into the bedroom and emptied her purse. Along with her cosmetics, her change, and her handkerchief, he found the bottle of pills. Tell what happened then.

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GAME - CLEANING OUT THE KITCHEN CUPBOARD

Object: To assist children in learning to discriminate in relation to materials used in the average household which may or may not be poisonous.

Formation: Circle or informal grouping.

Procedure: Half of the children are designated to represent non-edible substances; the other half represent materials which are usually safe to keep around baby.
Teacher "ad libs" a story about mother cleaning out the materials kept in a low kitchen cabinet near the floor, replacing the ones which might be poisonous on higher shelves, or under lock and key where baby brother or sister can't reach them. As she names each object which mother finds in the cupboard, those who represent "safe" or "unsafe" objects, whichever they may be, get up and turn around, then sit down again.

Objects named might be the following:

Crackers
shoe polish
pans
floor wax
potatoes
apples
soap
moth balls
dish cloths
furniture polish
silver polish
cleaning powder
carrots
dish towels
soap powder
detergent
cans of soft drinks
bottles of soda-pop
sprays.

A WRITING AND SPELLING ACTIVITY - MY OWN SAFETY DICTIONARY

Purpose:

During the course of the poison prevention activities, children will need to know the spelling of a number of words new to them and not necessarily appearing in their graded spelling lists. They can use these in writing stories, plays, letters to parents, and in preparing posters, charts, displays and bulletin boards. Keeping a special "Safety Dictionary" may prove helpful in developing this special writing vocabulary.

Procedure:

Provide enough paper for each child to have 8 half-sheets of newsprint to fold in the form of a booklet. For arithmetic experience, each child picks up and counts out his own sheets. After folding, he numbers them. Also provide a sheet of construction paper for a cover. The teacher writes the caption, "My Own Safety Dictionary" on the board. Each child copies the caption on the cover of his booklet and adds his name. He may also add an illustration

During the days the poison prevention unit is in progress, each child may enter in his booklet the new, more difficult words. The teacher may write on the board key words which she wishes the children to remember. A safety dictionary can be a useful all-year tool to assist in spelling of words needed in various phases of safety education as well as in poison prevention. A typical "dictionary" may contain the following words:

bottle
cabinet
cleaner
cupboard
doctor
drink
eat
food
high
hospital
kitchen
label
Lock
low
medicine
mouth
nurse
pharmacist
pills
poison
poisoning
polish
prescription
prevent
protect
reach
safe
safety
shelf
sick
spray
taste
touch
unsafe
well

OTHER ACTIVITIES

1. Design signs and slogans to be put up in the home in bedrooms, bathrooms, kitchens or utility rooms. They can also be placed in school corridors, store windows, business offices, banks, cafeterias, and on buses. Short captions are best: "Touch Not-Taste Not,"-"Poison-Please Don't Touch," "Poison Acts Fast-So Can Children," "Always Ask First."

2. Tell stories using a flannel board to illustrate them. If professionally-built flannel boards are not available, a piece of flannelette can be fastened over a board or heavy chart to use as a background. Scraps of felt or flannel may be shaped to make the scenery and figures; these will cling to the background without difficulty. Figures may be cut from magazines or from the pages of simple line drawings in the last section of this guide, or the children may draw their own figures. Sandpaper should be fastened on the backs of paper illustrations so that they will cling to the flannelboard. The flannelboard stories are best utilized by a group of children. However, small individual boards may be devised if material is available, with the added advantage that they may be taken home for demonstrations. If the children keep their figures and scenery in a drawer or box, they may utilize each others materials and dramatize the same or different stories again and again.

3. Write poison prevention rules together. Put them on a chart.

4. Using such well-known old tunes as "Farmer in the Dell,""Looby Loo," "Pop Goes the Weasel," or "Mulberry Bush," compose new words explaining some fact about poison prevention.

5. Draw cartoons illustrating such ideas as "Poisoning Hazards in the Home," or "Children at Home," in which children are seen performing safe and unsafe acts in relation to poison prevention.

VOCABULARY ... Simple definitions for pupils

1. Drug. Chemicals which may affect body structure or function, or alter behavior and which if used legitmately and wisely, may prevent, treat or cure illness.

2. Drug misuse or abuse. Mistreatment if the body or mind by the improper or excessive use of drugs.

3. Dependence. A compulsion to take drugs.

4. Tolerance. A tendency to need increased dosage to obtain the desires of desirable effect.

5. Depressant. A substance which speeds up the normal activities of the body or mind, "down" drugs, or "downers".

6. Stimulant. A substance which speeds up the normal activities of the body or mind, "up" drugs, or "uppers".

7. Tranquilizer. A substance which has a calming effect on the mind.

8. Hallucinogen. A substance which may cause a person to experience unreal sight, sounds of feelings; e.g., LSD.

9. Narcotic. Medically, a substance which induces sleep or masks pain; legally, a classification of certain of the most hazardous drugs; e.g., morphine, heroin.

10. Amphetamines. A chemical family of stimulant drugs which mask fatique, or depress appetite; e.g., pep pills, reducing pills, "speed".

11. Barbiturates. A chemical family of depressant drugs which induce relaxation and sleep, e.g., sleeping pills.

12. Inhalant. A substance which, if inhaled in large amount, may cause intoxication or unconsciousness; e.g., certain glues.

13. Over-the-counter drug. A drug which may be purchased without a prescription; commonly called OTC drugs; e.g., aspirin.

14. Prescription drug. A drug which may be purchased only if prescribed by a physician.

INFORMATION ABOUT ALCOHOL

GENERAL INFORMATION

1. The chief alcoholic beverage consumed in this country is beer, followed by the distilled liquors, with the wines a distant third. Americans spend about one out of every eight food dollars for alcoholic beverages.

2. About two-thirds of the people in the United States over 15 years of age drink to some extent. In San Francisco, it is estimated that 9 out of 10 people over 16 drink at least occasionally.

3. Many nationwide surveys show that about 67% of the high school students sampled have had some experience drinking as did almost half (48%) of the grade school students. Local authorities believe that in San Francisco the percentage is higher than the national norms.

4. Most students have already made the decision whether or not to drink by the time they graduate from high school.

5. Regional, subcultural and ethnic drinking patterns are clearly reflected in the drinking habits of adults.

6. The family is a dominant force in determining future drinking patterns of their children.

UNIQUE RISKS OF TEEN-AGE DRINKING

1. Since they are generally smaller and consequently weigh less, adolescents are affected more quickly and more severely by alcohol than adults.

2. The intense emotional response to situations characteristic of adolescents predisposes this group to be more susceptible to psychological intoxication to the extent that even one drink may result in erratic behavior.

3. The use of alcohol by adolescents as a means of coping with conflicts prevents the development of skills needed to solve the many problems of daily life.

4. The body tends to reject foreign substances on initial contact with the result that adolescents are more likely to become ill after drinking than are adults who have been accustomed to alcohol.

5. Recently learned skills are adversely affected by even small amounts of alcohol so that the combination of inexperienced drivers and inexperienced drinkers constitute a potentially dangerous situation.

6. The use of alcohol may reduce the desire for foods of adequate dietary value, at a time when rapid growth necessitates the maintenance of good nutritional practices.

NATURE OF ALCOHOLIC BEVERAGES

1. Ethyl alcohol is the principal intoxicating agent of most alcoholic beverages.

INFORMATION ABOUT ALCOHOL

2. The non-distilled alcoholic beverages such as wine, beer, ale, port, and stout are created through a process called fermentation.

3. Fermentation will not produce alcoholic beverages over 15%. In order to produce beverages with alcoholic content over 15%, a process called distillation must be employed or more alcohol must be added as is the case in making fortified wines such as port or sherry.

4. Distilled beverages such as whiskey, brandy, rum and vodka are made by collecting the steam which is a product of boiling a starchy substance.

5. Although alcohol may be classified as a food, it is a poor food from a nutritional standpoint because it lacks vitamins and minerals. Alcohol does release heat and energy. It liberates more calories than carbohydrates and less than fats.

METABOLISM OF ALCOHOL

1. Absorption is the process whereby food from the stomach progresses to the bloodstream. The rate of absorption may be affected by food in the stomach, speed of drinking, choice of beverage, and many other variable factors such as the condition of the liver, the presence of drugs, malnutriton, and whether or not alcohol is taken with food.

2. Oxidation is the process by which the dissolved alcohol in the blood is mixed with oxygen resulting in the release of heat and energy. During this process the alcohol undergoes changes in the liver before it is converted to heat and energy. Each individual burns alcohol at his own unique rate. This rate is in part affected by body size Large individuals can usually consume more alcohol than smaller persons without undue effects because they have more fluids in their bodies in which the alcohol is diluted.

SOME EFFECTS OF ALCOHOL

1. Alcohol is not a stimulant but rather a depressant and even small concentrations affect the higher brain centers. The intoxicating action of alcohol affects the brain causing impairment of its normal functioning which in turn results in abnormal activities of the organs controlled by the brain. In small doses it has a sedative effect, in larger doses an analgesic or pain killing effect, and in even larger doses a hypnotic effect. If the dose is great enough, death may result through the paralysis of the brain centers which control breathing and heart action.

2. The exact action of alcohol on the brain remains obscure.

3. Alcohol affects the function of various parts of the body, not the structure. Organic changes may accompany chronic alcoholism because of long standing nutritional deficiencies.

4. Personality traits such as aggression, timidity, superiority or inadequacy and other expressions of feelings not normally observed

in specific individuals except when drinking, are not created by the action of alcohol but simply released as formerly suppressed characteristics of the individual's existent personality. This condition arises, because of the depressant effect of alcohol on the parts of the brain which normally control inhibitions.

5. Even small amounts of alcohol may reduce one's ability to concentrate.

6. Deterioration of judgment and self-control with accompanying impairment of hearing, sight and touch is evident before any muscular decline.

7. Research studies substantiate the fact that alcohol creates a sense of well being which leads to over-confidence, inflated ego and a willingness to take a chance.

8. The detrimental effects of alcohol on manual or motor skill increases in proportion to the:
   a. complexity of the skill: the more complicated skills are adversely affected first.
   b. familiarity of the skill: newest learning is adversely affected first.
   c. drinking experience of the individual.
   d. individual capacity for self-control.

9. Alcohol increases the length of reaction time.

10. The risk of intoxication is neither enhanced nor diminished by combining different alcoholic beverages, but the likelihood of developing nausea is increased.

11. In small amounts, alcohol may increase appetite and aid digestion due to an increase in the digestive enzymes, but large amounts may result in over-acidity and discomfort.

12. The warmth attributed to alcohol occurs because of the dilation of capillaries near the surface of the skin. This is a false sensation, however, since the body temperature actually falls after this short lived reaction.

13. The lowered inhibitions and decreased anxiety level which follow drinking may increase the desire for sexual activity. Excessive drinking, however, decidedly impairs the ability to consummate such an act.

14. Assuming that conditions which affect absorption are equal, large individuals can drink more than smaller individuals before showing adverse effects since they have more fluid in the body by which to dilute the alcohol, thereby lowering its concentration. Psychological factors also significantly influence the onset of adverse behavior patterns which result.

15. Casual observations of drinking behavior point out the fact that the same amount of alcohol affects people differently. In many instances the phenomenon cannot be explained by differences in body size. In these cases the answer is most likely provided by psychological factors which are of significant

influence. The three most powerful psychological influences involve the individual's susceptibility to suggestion, his mood, and his expectations at the time of drinking. As a result, "nervousness" may be increased or decreased by alcohol.

16. Nausea or vomiting after drinking may be explained by a peculiarity called pylorospasm. This is the abnormal functioning of the valve leading from the stomach to the small intestines, causing a reverse in the normal peristalsis, or muscular contractions which move the food from the stomach to the small intestines.

17. The sedative effect of alcohol and the complicated nature of driving are incompatible. The greatest of all human traffic hazards is is an inexperienced driver who is ordinarily easily upset and who takes an unaccustomed drink or two before venturing out on the highway. Almost all teen-agers and some adults fall into this category. At least 50% of serious accidents are associated with drinking.

PROBLEM DRINKING

1. Problem drinking may be defined as the misuse of alcohol under any or all of the following conditions:
   a. on inappropriate occasions
   b. in excessive amounts
   c. with resultant behavior detrimental to the individual and his associates

2. Well over 90% of those who use alcoholic beverages do so in limited amounts on appropriate occasions and with no adverse effects.

3. Research studies indicate that one in 14 to 17 drinkers become problem drinkers, and of this group of problem drinkers one in about 17 becomes an alcoholic.

4. Problem drinking and successful family membership often are incompatible.

5. Criminologists generally agree that excessive drinking rarely is the prime cause of criminal behavior although many prison inmates have drinking problems.

ALCOHOLISM

1. Drinkers who become alcoholics can be described as those individuals who have lost control of their drinking habits to the extent that they are intoxicated frequently or for several hours or days at a time, drink at inappropriate times, gulp drinks, lost interest in activities other than drinking, endanger their health through preoccupation with drinking, and those who drink not by choice, but by compulsion.

2. Alcoholism is a major public health problem that affects 4 to 5 million people in the United States, or approximately 4% of the adult population. The proportion of alcoholics has not increased over the past decade.

INFORMATION ABOUT ALCOHOL

3. Alcoholism is the fourth biggest public health problem, superceded only by heart disease, cancer and accidents.

4. Alcoholism, by the definition officially adapted by the World Health Organization and the American Medical Association, is a disease. An alcoholic, therefore, is a sick person, not a criminal nor moral reprobate.

5. The rate of alcoholism in San Francisco is the highest in the nation for a city of comparable size.

6. Cirrhosis of the liver, often but not always associated with excessive drinking over a long period of time, is the 4th leading cause of death in San Francisco; in California it is 6th; in the United States, 9th. (1967 statistics, San Francisco Department of Public Health.)

7. The causes of alcoholism are still unknown. It is a complex illness which undoubtedly has biological, psychological, and sociological components.

8. Most alcoholics are not on Skid Row. Almost all of them live in typical residential districts and are employed.

9. Alcoholics are susceptible to nutritional deficiency diseases. Eight ounces of distilled liquor provides a 150 pound man with two-thirds of his caloric requirement for one day. Typically, the heavy drinker is disinterested in food because his caloric needs, though not his nutritional needs, have been fairly well met by alcohol.

HANG-OVERS

1. The discomfort which follows excessive drinking results from a disturbance in the equilibrium of fluids in and around the cells.

2. Time, sleep, and rest are the only cures for this condition.

3. Popular folklore that exercise, fresh air, cold showers, black coffee and such will hasten recovery from excessive drinking has no scientific foundation. A temporary exhilaration may result from such "treatment" but the level of intoxication remains the same.

INFORMATION RELEVANT TO PREVENTING INTOXICATION

1. The only sure preventative is abstinence.

2. Drink sparingly, slowly, and choose well-diluted drinks instead of more concentrated ones.

3. Eat before and during drinking. Foods eaten with drinks "insulate" against the rapid effects of alcohol. Proteins are more effective for this purpose than fats or starches.

4. Carbonated dilutants, such as soda water, speed the action of alcohol; water used as a mix slows down alcohol's action.

5. The effects of alcohol are felt more quickly at high altitudes than at sea level.

6. Small individuals who do sedentary work will feel the effects of the same amount of alcohol more quickly than large individuals who do hard physical labor.

7. If you must drive after drinking, wait at least one hour after the last drink before taking the wheel. This time lapse permits the body's oxidation mechanism to catch up and thus utilize the alcohol.

8. Taking drugs or medicine of any kind with an alcoholic beverage is extremely risky because of the synergistic effects of many drugs. For example, a highball plus a sedative may not be just twice as potent as either alone; it may be at least four times as potent.

SUGGESTIONS FOR TEACHING ABOUT ALCOHOL

1. Since today's youth will probably follow the example of their elders, most of them will drink to some extent at some time in their lives. Along with pointing out the legal aspects and mental health advantages of abstinence during adolescence, teach enough about alcohol's varied effects so students will understand how to minimize the risks of intoxication when and if they or their associates ever drink.

2. Distinguish clearly between drinking, drunkenness, and alcoholism. The first is a social custom acceptable to most adults or appropriate occasions. The second is rarely socially acceptable and is always risky. The latter is a disease or disorder.

3. Since young people are more interested in the prsent than the future, concentrate on the subject of "drinking" rather than alcoholism. Older teen-agers will be more interested in alcoholism as a social problem than as a threat to themselves in later life.

4. Be sure students know where to get help for alcohol-related problems. Among the resources are medical and religious advisers, Alcoholics Anonymous (for adults with alcohol-related problems), Alanon (for family members of all ages who have a loved-one with an alcohol problem), and Alateen (for teen-agers with an alcohol problem).

5. Emphasize that the most immediate effects of alcohol are impaired judgment and diminished inhibitions. Tie this in with discussion of dating behavior.

6. Help the student realize that drinking never solves any problem and frequently creates new and more serious problems.

7. Impress the students with the fact that an alcoholic is a person who is ill and in need of treatment and understanding rather than censure.

Reference:
F. Todd, Teaching About Alcohol

INFORMATION ABOUT DRUG USE AND MISUSE

THE DRUG MISUSE PROBLEM

Arrests of California juveniles for drug offenses increased 24% over the five year period 1961-1966. In San Francisco, juvenile arrests increased from 9 in 1963 to an overwhelming 167 in 1966, representing an increase of well over 1500%. The average age of the offenders is 16 years. Law enforcement agencies believe that arrest statistics represent only an extremely small percentage of the actual incidence of illegal juvenile drug usage.

TERMINOLOGY

1. Drug: any non-food substance, medicinal or non-medicinal, which may be potentially harmful to the individual or society.

2. Drug misuse: self-administration of any drug to the extent that the individual or society may be harmed.

3. Dependence: according to the World Health Organization, dependence means "a state arising from repeated administration of a drug on a periodic or continual basis". The terms "addiction" and "habituation" are no longer used by most authorities. The use of the more general term, "dependence", requires delineating the exact drug which one is discussing, e.g., drug dependence of the opiate type.

4. Tolerance: a physiological condition whereby the drug user is forced to increase steadily the dosages of the drug to realize the desired effects.

OPIATES

1. Medicial use: relief of pain.

2. Examples: morphine, codeine and other opium derivatives, heroin (produced synthetically from morphine), percodan.

3. Usual method of use: intravenous injection.

4. Effects: drowsiness, sleep; side effects: nausea, vomiting, constipation, itching, constriction of pupils, slow breathing.

5. Heroin.

   a. Produces "high" or "kick" of almost orgasmic nature, followed by "nod" or state of euphoria or oblivion.
   b. Withdrawal symptoms severe.
   c. Diminishes sexual desire and activity.
   d. Tolerance develops quickly.
   e. Damage to tissues is rare.
   f. Rarely used by school-age youth.

6. Opiates in cough syrup

   a. Use by youth believed fairly common, but difficult to assess extent accurately.
   b. Many cough syrups containing opiates also contain an emetic which tends to reduce change of dependency.

INFORMATION ABOUT DRUG USE AND MISUSE

DEPRESSANTS: Barbiturates and Tranquilizers

1. Barbiturates: (commonest drug which produces dependence)
    - a. Medical uses: sedative, sleep producer, control of disorders such as epilepsy, high blood pressure, gastrointestinal illnesses.
    - b. Examples: drugs under trade names of seconal, amytal, nembutal.
    - c. Safety: usually safe if used exactly as prescribed.
    - d. Usual form: pills, capsules.
    - e. Symptoms of abuse: intoxication similar to that of alcohol; slurred speech, staggering gait, sluggish reactions, erratic behavior, laughs or cries easily.
    - f. Withdrawal from a dependent individual can cause convulsions which can be fatal if untreated.
    - g. Using barbiturates and alcohol at the same time can be extremely dangerous because of the synergistic effects of the drugs.
    - h. Death rate from accidental or intentional excessive use is very high.
    - i. Physiological and psychological dependence may result from excessive use.

2. Tranquilizers
    - a. Medical use: relief of minor mental or emotional disorder.
    - b. Psychological and physiological dependence may result from excessive use.
    - c. Withdrawal from dependent individual can cause convulsions which can be fatal if untreated.

STIMULANTS: Cocaine and Amphetamines

1. Cocaine
    - a. Derived from leaves of coca tree.
    - b. No longer used medically except as local anaesthetic.
    - c. Widely used in parts of Latin-American, where dependence is common.
    - d. Effects: reduction of fatigue, talkativeness, euphoria, increased muscular strength, hallucinations, followed by depression.

2. Amphetamines
    - a. Medical use: treatment of obesity, depression, hypoactivity, behavioral disorders in children, excessive sleepiness.
    - b. Examples: trade names such as dexedrine, methedrine or metamphetamine ("crystal" or "speed"), benzedrine.
    - c. Effects: produces feeling of well-being, counteracts depression, inhibits appetite, masks fatigue, increases alertness.
    - d. Effects of misuse: psychological but not physiological dependence, increased tolerance requiring dosage many times that used medically; restlessness, talkativeness, excitability, insomnia, profuse perspiration, increased urinary frequency, tremor; if used intravenously, psychotic behavior may result.

e. Frequently misused by students to stay awake to study for final examinations, and by drivers on long motor trips.

HALLUCINOGENS

1. Medical use: experimental medical use of LSD in the treatment of alcoholism and certain psycho-sexual disorders has been reported as potentially successful; other hallucinogens have no medical use.

2. Examples: LSD, DMT, peyote, psilocybin, mescaline, marihuana.

3. Effects: distorted sensory perceptions, psychological dependence; no physical dependence is believed to be produced, no physical symptoms occur on withdrawal.

4. LSD

   a. Effects: visual, auditory and tactile hallucinations, changes in perception, thought, mood, activity, time sense, comprehension; some "trips" are characterized by panic, disorientation, severe depression.
   b. Lasting effects: in some users, may include psychotic behavior, even in persons who previously exhibited no signs of emotional instability.
   c. Recurrence of psychotic effects may occur weeks or months after dosage.
   d. Epileptic seizures may be triggered.
   e. There is some evidence that genetic damage may occur and adversely affect progeny.
   f. Claims by proponents of improved functional efficiency and expanded consciousness have not been proven by objective investigation; on the contrary, impaired functioning results.

   g. Many suicides and other acts of violence have occurred while individuals were under the influence of LSD.
   h. Patterns of LSD usage: many adolescents are particularly interested in LSD since this is the age group in which the search for identity, exploration, attempt to achieve adult status through rebellion against society, and the seeking of solutions to personal conflicts, plays such a significant role. They believe LSD may provide the solution to one or more of these problems. Newspapers, television, radio, and even prominent persons have glorified LSD to the extent that pushers merely have to supply the drug to customers rather than persuade or induce them to indulge in its use. Dr. Sidney Cohen classified the LSD user as follows:

      (1) The Explorer: curious to experience sensory awareness characteristic of the drug.
      (2) The Social LSD Takers: provides a common bond for sense of belonging.
      (3) Hedonistic Group: takes the drug for kicks. Among this group are those who are dissatisfied with reality. LSD is used as a means of withdrawal and continuous escapism.
      (4) Magic Pill Group: hope LSD will cure them of what they really are:

emotionally immature individuals who are probably pre-psychotic.

(5) Artistic Group: attempt to see things differently through altered perception; common throughout history.

(6) Religious Seekers: believe LSD provides answers to questions about the universe and solutions to one's personal problems.

(7) Accidental Takers: this group usually consists of children but also includes some adults who have been given the drug without their knowledge.

5. Mescaline, psilocybin, peyote, DMT produce effects similar to LSD, but the effects are usually less intense and are of shorter duration.

6. MARIHUANA

a. Medical use: none.
b. Usual method of use: smoked or eaten.
c. Effects: psychological dependence, particularly in susceptible individuals, distortion of sense of time and distance; euphoria; feeling of exaltation; dreaming; and sometimes hallucinations; panic or fear may result; user may be very talkative, or very quiet and drowsy; effects are unreliable and unpredicitable.
d. Physical dependence, abstinence syndrome, physical damage do not develop.
e. In San Francisco, 59% of the juvenile drug arrests involved marihuana users. (1966)

f. Harm to society is derived from economic consequences of the impairment of the individual's social functions and his enhanced proneness to asocial and antisocial behavior.

SOLVENTS

1. Examples: glue, gasoline, paint thinners, lighter fluid, coolants and other volatile chemicals.

2. Effects: state of excitation and exhilaration similar to alcoholic intoxication, often characterized by blurred vision, slurred speech, loss of balance, black-outs; prolonged use may result in anemia, mental deterioration, liver damage, and death.

3. Users sometimes use plastic bags to hold the glue or solvent up to their face, thus risking suffocation.

4. Misuse is usually limited to individuals in late childhood or early adolescence, and is most frequent among children with a history of delinquent behavior.

SOCIAL ASPECTS OF DRUG MISUSE

1. Society should accept the existence of and differentiate between the occasional or spree drug user and the chronic abuser to whom drug abuse is a way of life.

2. The chronic abuser is a sick individual and should be treated as such.

INFORMATION ABOUT DRUG USE AND MISUSE

3. Drug misuse is a sympton of a deep, underlying disorder; it may range from teen-age rebillion to sever disorders, and is often characterized by loneliness and alienation.

4. Legal restriction on drugs has been part of society since the dawn of history and is a social necessity.

5. The family is the prime influence on the prevention of drug misuse by the young. Parental love, care, and guidance particularly during the years of late childhood and adolescence, insulate the child against loneliness and alienation, and usually young people thus influenced have no need to escape by means of drug misuse.

TIPS FOR TEACHING ABOUT DRUG USE AND MISUSE

1. Aim for an honest balance between the conservatively alarmist and the defiantly radical. Differentiate between facts, beliefs, and opinions.

2. Narrow the communication gap between the generations:
    a. Be familiar with the sources from which teen-agers get their information as well as the sources teachers consider prestigious.
    b. Know the jargon of teen-agers and the drug-using subculture.
    c. Let pupils air their views freely in an atmosphere of mutual curiosity and a sharing of opinion and experience.
    d. Listen and look for differences between pupils' words and actions and their underlying needs and motives.
    e. Be constantly aware that social attitudes which create undue stress situations may do more lasting harm than a one or two time use of most drugs.

3. Guide pupils to differentiate between:
    a. Physiological effects of drugs and the influence of drugs on psychological effectiveness.
    b. Honest scientific research and pseudo-research.
    c. Medical views and moral views.
    d. The often divergent viewpoints of health scientists, criminologists, and human rights proponents.
    e. Risks inherent in the use of any drug, and the risks of known or suspected dangerous drugs.
    f. Risks and benefits of the use of dangerous drugs, short term and long term, physiological, psychological, and social.

4. Explore with pupils some of the reasons teen-agers take dangerous drugs.

5. Minimize teacher-imparted information. Substitute dialogue-centered instruction. Center activities around situations and concerns that are real or realistic to the pupils.

6. Pre-test: you may be amazed at how well-informed your pupils are on a subject of deep interest to them.

7. Use examples from current mass media. Help students evaluate reporting, detect bias, identify honest onctroversy, differentiate

between sensationalism and scientific findings.

8. Consider: Have we overstressed happiness and fun in our society? To what degree is stress related to human productivity and personal and social well-being? How does this relate to the drug subculture?

9. Explore with pupils: If a person who tuned in, turned on, and dropped out wants to tune out, turn off, and drop back, how can he be helped?

10. Know some of the reasons why marihuana is more risky than alcohol; (illegal, effects less predictable and reliable, users isolate themselves from mainstream social activities of the majority of people).

11. Gear your teaching to a realistic target group. You'll not convert the extremists. You'll probably reinforce the beliefs of many of your pupils. Your instruction is most likely to influence those who are not' too strongly committed and who are still open minded.

12. Be honest. If you don't know the answer to a question, admit it. If there are controversial answers, give all sides of the story. If pupils ask your opinion or beliefs, state them. Don't scold, threaten or exhort. Remember: few teachers but most teen-agers are under peer pressure to experiment with drugs.

13. Our young people believe in physical, material, intellectual, psychological, and spiritual fulfillment. Explore with them how drug misuse may damage or prevent their achieving self-fulfillment. Help them see that if they get "hung-up" on drugs they will have "copped-out" on themselves.

14. Finally, be aware that during the teen years acceptability as a worthwhile person is harder to come by than at any other time of life. Younger children, and adults of all age groups, do not readily accept teen-agers and their behavior. Acceptance by teen-agers of members of their own age group is even a greater problem.

References:
California State Department of Education, Drug Abuse, A Source Book and Guide for Teacher, 1967
AAHPER-NEA, Drug Abuse, Escape to Nowhere, 1967

INFORMATION ABOUT SMOKING

PREVALENCE

1. A survey conducted by the Advisory Committee to the Surgeon General indicates that less than 5% of the boys and 1% of the girls smoke regularly before the age of 12. By the 12th grade, however, 40 to 55% have been found to be smokers.

2. Estimates of smoking incidence by age 25 are believed to be approximately 60% in men and 36% in women. Smoking prevalence continues to increase until age 35 or 40, after which a decline occurs, until at age 65, 20% of the men and 4% of the women are smokers.

PATTERNS OF SMOKING BEHAVIOR

1. Most authorities and studies agree that the teen years are crucial in determining smoking behavior in that the majority will decide whether or not to develop the practice during this period.

2. Smoking behavior is often strongly influenced by the permissive or prohibitive attitudes of family and friends.

3. There does not appear to be any definite "smoker personality". Certain personality traits are more likely to be observed in smokers; such as extroversion, neuroticism and a more than usual amount of psychosomatic problems.

4. Stressful or challenging experiences are believed to be factors influencing the beginning smoker as well as in reinforcing the habit and the number of cigarettes consumed.

5. The habitual use of tobacco is associated primarily with psycho-social drives which are strengthened by the drug effects on the central nervous system.

6. There is ample evidence to support the fact that the smoking habit becomes compulsive in some heavy smokers. This dependency is psychological in nature. There are no physical withdrawal symptoms which characterize physical dependence upon abstinence from smoking.

7. The motivation for using tobacco must be considerable since it is well known that among beginning smokers certain toxic or poisonous effects such as nausea and vomiting often accompany the initial usage of tobacco.

8. Statistics prove that giving up the smoking habit is extremely difficult for many individuals. Of the methods employed to cure the habit, those which deal with the psychogenic drives have been more successful.

9. It has been suggested that the most effective way to cut down on the number of smokers among young people would be to eliminate the habit among the parents, since it has been demonstrated in some studies that there is a strong correlation between parents' smoking behavior and that of their children. The similarity in children and parent habits constitutes,

INFORMATION ABOUT SMOKING

according to some authorities, evidence that beginning smoking is initiated by an imitation of and wish for, adult status.

SMOKING AND MORTALITY

1. Observations of thousands of patients and autopsy studies show that many kinds of damage to body function, organs, cells, and tissue occur more frequently and severely in smokers than in non-smokers.

2. The mortality rate for male cigarette smokers is 70% higher than for non-smokers. In general, the greater the number of cigarettes smoked daily the higher the death rate.

3. The mortality rate for smokers who inhale is greater than for smokers who do not. The mortality rate of cigarette smokers appears to be considerably higher than for pipe and cigar smokers. Smokers in the latter two categories, however, have a relatively high mortality rate for cancers of the mouth, esophagus, larynx, and lung as well as for cirrhosis of the liver and stomach and duodenal ulcer.

SMOKING AND CANCER

1. A considerable amount of experimental work in many species of animals has demonstrated that certain ingredients identified in cigarette smoke can produce cancer.

2. Research has shown that cigarette smoking is causally related to lung cancer in both men and women.

3. The risk of developing cancer of the lung for pipe and cigar smokers is greater than in non-smokers, but much less than the risk incurred by cigarette smokers.

4. The risk of developing lung cancer increases with the duration of smoking, and the number of cigarettes smoked per day, and is diminished by discontinuing smoking.

5. The mortality ratios for cigarette smokers as against non-smokers are 11 to 1 for cancer of the lung and bronchus. There is also a substantially higher risk associated with cancer of the larynx, oral cavity, esophagus and urinary bladder.

6. There appears to be no significant relationship between gastric cancer and smoking.

SMOKING AND CARDIOVASCULAR DISEASES

1. Recent studies have revealed that cigarette smokers are more prone to die of certain cardiovascular disorders than non-smokers. The studies indicate that the ratio of death from these disorders between smokers and non-smokers is about 2 to 1. This ratio is affected by the number of cigarettes consumed.

2. Although little is known regarding the composition of cigarette smoke after it leaves the mouth and enters the lungs, it is believed that it contains no less than nine gases which are believed to be irritating to the lungs. 80 to 90% of the particles contained in cigarette smoke are retained in the mouth

INFORMATION ABOUT SMOKING

and respiratory tract and lungs. Although the exact percentage is not known, it is believed that the vast majority of particles are deposited deeply into the respiratory tract.

3. Chronic brochitis is a very common condition in which excessive mucous secretion in the bronchioles causes recurrent coughing.

4. Emphysema, a frequent complication of chronic bronchitis, is a serious and often fatal disease characterized by enlared air sacs in the lung. It is the 8th cause of death in San Francisco and 10th California and the United States.

5. Chronic bronchities and emplysema are diseases of great public health importance in the United States. They are linked with the excess mortality of cigarette smokers.

SOME CONCLUSIONS

1. Cigarette smoking is the most important of the causes of chronic brochitis in the United States.

2. A relationship exists between pulmonary emphysema and cigarette smoking.

3. For the bulk of the population of the United States, the importance of cigarette smoking as a cause of chronic respiratory disease is much greater than that of atmospheric pollution.

4. Cough, sputum production, or the two combined, are consistently more frequent among cigarette smokers than among non-smokers.

5. Cigarette smoking is associated with a reduction in the efficiency of the lungs. Among males cigarette smokers have a greater prevalence of breathlessness than non-smokers.

6. Cigarette smoking does not appear to cause asthma.

7. Cigarette smokers have a moderately increased risk of death from influenza and pneumonia.

8. Although some people claim there are good effects from smoking, such as relaxation, most authorities agree that those "good effects" do not counter balance a definitely known health hazard.

STATE OF CALIFORNIA NARCOTIC PENALTIES

		1st Offense		2nd Offense		3rd Offense	
Narcotics	Adult Conviction	Years	Minimum	Years	Minimum	Years	Minimum
Heroin	Possession	2-10	2	5-10	5	15-life	15
Opium	Sales or furnishing	5-life	3	10-life	10	15-life	15
Morphine	Adult to minor Minor to minor	10-life 5 minimum	5	10-life 10 minimum	10	15-life	15
Codeine	Sale	1-10					
Dermerol							
Methadone							
Cocaine							
Marijuana							
Marijuana	Cultivating	1-10		2-20		5-life	
(Considered a narcotic under the law)	Possession for sale	2-20		5-15		10-life	
	Sale	5-life	3	5-life	5	10-life	10
	Adult to minor	10-life	5	10-life	10	15-life	15
Peyote	Cultivate/process	1-10		2-20			
	Possession	2-10		5-20	5	15-life	15
	Sale	5-life	2	10-life	5	15-life	15
Prescriptions	Forgery	6 mos.-1		10		10	
Addicts	Using/influence of	3 mos.-1					
	registration	Misdemeanor					

STATE OF CALIFORNIA NARCOTIC PENALTIES

Dangerous Drugs	Adult Conviction	1st Offense Years	2nd Offense Years
LSD, DMT, STP	Possession	$1,000 and/or 1	1-5
Depressants:	Sale (for)	1-3	2-10
Nembutal, Seconal,	Actual sale	1-5	2-10
etc. (barbiturates)	To minor	1-5	2-10
Miltown, Librium			
(tranquilizers)			
Stimulants:			
Benzedrine (Amphetamine)			
Methamphetamine (speed)			

LAWS PERTAINING TO NARCOTICS AND DANGEROUS DRUGS VIOLATIONS

FEDERAL LAWS

1. Harrison Narcotic Act of 1914 - basis of all narcotic laws
2. Import and Export Act of 1922 - this outlaws Heroin
3. Marijuana Tax Act - 1937
4. Boggs Act of 1950 - mandatory sentences for narcotic tax violations
5. Narcotic Control Act - 1956

STATE LAWS

A. Health and Safety Code (Div. 10)

(1) 11500 H & S Code - Possession of Narcotics (Heroin, Morphine, Percodan, Cocaine) (F)

(2) 11500.5 H & S Code - Possession of Narcotics with Intent to Sell (Heroin, Morphine, Percodan, Cocaine) (F)

(3) 11501 H & S Code - Sale of Narcotics (Heroin, Morphine, Percodan, Cocaine) (F)

(4) 11502 H & S Code - Sale of Narcotics to Juvenile (F)

(5) 11503 H & S Code - Offer to Sell Narcotics or Delivers Substance in Lieu of Narcotics (F)

(6) 11530 H & S Code - Possession of Marijuana/Harvesting or Cultivating (F)

(7) 11530.5 H & S Code - Possession of Marijuana with Intent to Sell (F)

(8) 11531 H & S Code - Sale of Marijuana (F)

(9) 11532 H & S Code - Sale of Marijuana to Juvenile (F)

(10) 11540 H & S Code - Possession of Peyote/Harvesting or Cultivating (F)

(11) 11721 H & S Code - Illegal Use or Under the Influence of narcotics (M)

(12) 11555 H & S Code - Illegal Possession of Narcotic Paraphernalia (M)

(13) 11556 H & S Code - Unlawful Presence or Visit Where Narcotics are Used (M)

(14) 11910 H & S Code - Possession of Dangerous Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (M) (Prior F)

(15) 11911 H & S Code - Possession of Dangerous Drugs with Intent to Sell, Amphetamine, Barbiturates, L.S.D., or D.M.T. (F)

(16) 11912 H & S Code - Sale of Dangerous Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (F)

(17) 11913 H & S Code - Sale or Furnishing Juvenile Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (Use of Minor) (F)

B. Business and Professions Code

(1) 4237 B & P Code - Forged/Fictitious/Altered Prescription (first offense (M) - second offense (F)

C. Penal Code

(1) 4573 P.C. - Bringing Narcotics Into County Jail (F)

(2) 4573.5 P.C. - Bringing Dangerous Drugs Into County Jail (F)

(3) 4573.6 P.C. - Possession of Narcotics or Dangerous Drugs in County Jail (F)

D. California Vehicle Code

(1) 12805 C.V.C. - The Department of Motor Vehicles shall not issue or renew a license to a person who is addicted to narcotics or habitually uses drugs.

(2) 13202 C.V.C. - A Court may revoke a driver's license upon conviction of any narcotic offense defined in Division 10 of the Health and Safety Code, starting at Section 11000, when the use of a motor vehicle is involved in the commission of the offense.

(3) 23101 C.V.C. - Any person driving under the influence of intoxicating liquor or combined liquor and any drug, and causes bodily injury is guilty of a felony. May be sentenced to the state prison not less than one year or in the county jail not less than one year.

(4) 23102 C.V.C. - Driving under the influence as above and no bodily harm, a misdemeanor.

(5) 23105 C.V.C. - Unlawful to drive while addicted to the use, or under the influence of narcotic drugs or amphetamine or any derivative thereof. A felony.

(6) 23106 C.V.C. - Unlawful for any person to drive under the influence of any drug, other than a narcotic or amphetamine or any derivative, must render him incapable of safely driving a vehicle. A misdemeanor.

(7) 23108 C.V.C. - Driving under the influence of any dangerous drug other than a narcotic and causes bodily injury. May be sent to state prison not less than one year, nor more than five, or county jail not less than 90 days nor more than one year. A felony.

E. Welfare and Institution Code

(1) 3100 W.I.C. - Voluntary commitment fortreatment of narcotic additic.

(2) 3100.6 W.I.C. - Involuntary commitment o narcotic addicts by health office or peace officer.

F. Harbor-Navigation Code

(1) Section 655 - Motorboat, vessel or water-skis while under the influence of a narcotic or barbiturate. A. misdemeanor.

TEACHER REFERENCES

Books, pamphlets and periodicals

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3. Bowen, Haskell L.: "Drug Facts." Santa Clara County Drug Information Center, 1968
4. Bowen, Haskell L. and Landin, Les: "About Drugs." Santa Clara County Office of Education, 1968
5. Bureau of Criminal Statistics. "Drug Arrests and Dispositions in California, 1967. Sacramento: California Department of Justice, 1968
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8. Landis, James B. and Fletcher, Donald K.: "Drug Abuse A Manual for Law Enforcement Officers." Philadelphia: Smith Klein, and French Laboratories, 1966
9. McCarthy, Raymond G, (Revised by John J. Pasciutti): "Facts about Alcohol." Chicago: Science Research Associates, Inc., 1967
10. "Physicians Desk Reference to Pharmaceutical Specialties and Biologicals:" Oradell, New Jersy Medical Economics, Inc., annual
11. Smith David E.: "Current Marijuana Issues." Journal of Psychedelic Drugs; Volume 2, Issue 1, Fall, 1968
12. Todd, Frances: "Narcotics and Dangerous Drugs A Resource Book for Teachers." San Francisco Unified School District, 1957
13. Todd, Frances: "Teaching About Alcohol." New York: McGraw-Hill Book Company, 1964
14. Vogel, Victor H. and Vogel, Virginia E.: "Facts About Narcotics and Other Dangerous Drugs." Chicago: Science Research Associates, Inc., 1967

15. U. S. Department of Health Education and Welfare: "A Guide for Teaching Poison Prevention in Kindergartens and Primary Grades." Washington, D. C: U. S. Government Printing Office, 1966

16. U. S. Department of Justice, Bureau of Narcotics and Dangerous Drugs. "Drugs of Abuse." Washington, D. C.: U. S. Government Printing Office, 1967

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

Sample Lesson Plans

DRUGS AND HAZARDOUS SUBSTANCES

Grades 4-6

For optional trial use, Fall term, 1969

Dr. Robert E. Jenkins
Superintendent of Schools

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

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Grades 4-6

For optional trial use, Fall term, 1969

Prepared by

Robert Johnson, Patrick Henry School
Vermuta Morris, Lafayette School
Ronald Penzel, John McLaren School

Edited by

John Freeman, Balboa High School
Eugene Huber, Teacher-Specialist, Health Education
Dr. Frances Todd, Supervisor, Health Education

Under the direction of

George Canrinus, Coordinator, Health, Physical Education, Recreation
Dr. Raymond Pitts, Assistant Superintendent, Instructional Development
Dr. Donald Rhodes, Assistant Superintendent, Elementary Schools

GRADES 4-6

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DRUGS AND HAZARDOUS SUBSTANCES

GRADES 4-6

Concept

THE USE OF SUBSTANCES WHICH MODIFY BODY FUNCTIONING, FEELINGS AND BEHAVIOR ARISES FROM A VARIETY OF MOTIVATIONS AND MAY BE BENEFICIAL OR HARMFUL.

Behavioral Objectives

The student

1. describes a variety of substances used by man to modify body functioning, feelings and behavior
2. concludes that harm may result from self-diagnosis, self-medications, and the unwise use of drugs, medicines, devices, cosmetics, dietary supplements and potentially hazardous substances
3. recognizes that alcohol is used by some people for dietary, ceremonial, and social reasons, by other people because of its drug-like effects, and by a few people not at all
4. discusses why some drugs are used rather commonly and others only under special circumstances
5. illustrates how certain drugs may have beneficial effects in some circumstances and harmful effects under other conditions
6. explains the synergistic effects which may occur when two drugs are taken at the same time
7. explains why the use of tobacco is a serious risk to health.

GRADES 4-6

Outline

Grade 4	Common drugs and hazardous substances Smoking and health Alcohol as a depressant drug Drinking motivations
Grade 5	Safe use of common drugs, household and garden chemicals Decision making Stimulant and depressant drugs: use and misuse Pressures to experiment with smoking and drinking Marijuana Laws about drugs

Grade 6 Effects of certain hazardous substances

- Volatile chemicals
- Over-the-counter drugs
- Prescriptive drugs
- Nicotine
- Alcohol
- Marijuana
- LSD

Synergistic actions of some drugs
Motivations for misuse and abuse
Legal Controls

- Local
- State
- National
- International

GRADES 4-6

Learning Aids for Pupils

Grades 4,5,6
Pamphlet
Bowen and Landin, About Drugs, 1968
A/V Aids

1. Body Systems Teaching Kit,(transparencies), 1969
   Cleveland Health Museum
   One copy consigned to each school

2. Drugs and Your Body, (transparencies), 1968
   Popular Science and Federal Food and Drug Administration
   One copy consigned to each four schools

Grade 4
Texts
Byrd, Health
Brandwein, Concepts in Science
A/V Aids

1. The Huffless, Puffless Dragon (motion picture), 8 min., 1964
   Borrow from Cancer Society, Interagency Council on Smoking and Health

2. Mannequins, Modern Millie and Smoking Sam
   Interagency Council on Smoking and Health

3. Alcohol and You, (filmstrip), Part 1, 616.86-FS-1, 1953

Grade 5
1. Smoking, Past and Present (motion picture), 15 min., 1968
   Borrow from Cancer Society, Interagency Council on Smoking and Health

2. Alcohol and You (filmstrip), Part 2 . 616.86FS-1, 1953

Grade 6

Pamphlets

1. Marijuana, 1969
2. The Up and Down Drugs, 1969
3. LSD, 1969
4. Narcotics, 1969

U. S. Department of Health, Education, and Welfare
50 copies consigned to each school

A/V Aids

1. Drugs and the Nervous System (motion picture) 20 min., 1967
Churchill Q613.8-MS-2

2. Drugs: Helpful or Harmful (filmstrips and recording), 16 min.
Los Angeles Medical Society and Public Schools
One copy consigned to each school

3. Drug Identification (slides), 1969
One set consigned to each school
SFUSD

GRADE 4

Objectives

To help pupils

1. become aware of the complex nature of drugs and common substances which sometimes are helpful and sometimes harmful to man

2. know the differences between over-the-counter drugs, prescription drugs, and non-drug substances which may be hazardous

3. understand that families vary in their views and practices about the use of medications, alcoholic beverages and tobacco

4. differentiate between the wise and unwise uses of certain drugs and hazardous substances

5. communicate with their parents about their study of drugs.

Lesson 1

Concepts

1. An understanding of the meaning of certain words associated with drugs is helpful in reading and heading directions and warnings on the labels.

2. Some drugs and hazardous substances are found in every home and school and need to be identified and used only under proper conditions.

Learning opportunities

1. Children and teacher prepare a display table or bulletin board containing empty, labeled containers of drugs and hazardous substances found in the school, and home. Encourage pupils to handle and observe the display.

2. Present the vocabulary and use the words to classify the display items, at first by two categories, drugs and hazardous substances, and then by other categories.

3. Individual or small group study of labels, stressing understanding of cautions, warnings, and directions.

4. Show transparencies (commercial, or homemade) of typical labels and instruction sheets in drug container and packages; or, use opaque projector. Ask pupils to explain warnings in their own words.

5. Write a class letter to parents telling them about the unit on drugs. Invite them to visit the class and learn with their children, and to help their children at home to learn parental viewpoints and beliefs on drugs, smoking and drinking.

6. Invite the school nurse, a pharmacist, or a physician to visit the class as a resource person.

7. Ask the children to bring additional items from home for the display, stressing that the containers shouldbe empty but that the labels should be left intact.

8. Consult the health text, teacher's edition, for additional suggestions and reading assignments.

Lesson 2

Concepts

1. The risks inherent in all drugs and substances may be minimized if instructions about their correct use are carefully followed.

   - Children should take medications only when directed to do so by parents or physicians
   - Directions and warnings on labels should be carefully read, understood and followed
   - Illness can result if drugs are carelessly or improperly used

2. Older children have a responsiblility to protect younger children from harm from household and garden items which contain dangerous chemicals.

3. The chemicals in drugs travel throughout the body by the blood's circulation.

4. Among the useful drugs are those which prevent illness, e.g., drugs used in vaccinations and inoculations.

Learning opportunities

1. Add to the display the items children bring; identify and classify each.

2. Introduce any parents present and invite them to participate in the class work.

3. Begin developing a class list of health and safety rules for the use of drugs and hazardous substances.

4. Using Body Systems Teaching Kit, explain how drugs circulate throughout the body once they are ingested or otherwise introduced into the body.

5. Ask children to discuss the "shots" they have taken: what was their purpose, who administered them, what precautions for cleanliness did the doctor or nurse take, etc.

6. Ask a medically trained resource person to talk about inoculations as examples of drugs which prevent illness.

Lesson 3

Concepts

1. The history of man's use of tabacco extends over many centuries and through many countries.

2. There are legal as well as health reasons why minors should avoid the use of tobacco.

3. Information about cigarettes is reliably distributed by such groups as the American Medical Assocation, the Surgeon-General and the Cancer and Heart agencies, and often unreliably distributed by advertisements whose purpose is to sell tobacco rather than protect health.

4. Almost all parents and other responsible adults agree that children should never start to smoke.

Learning opportunities

1. Committee or individual reports on the history of the use of tobacco by such peoples as the Maya and American Indians, Europeans and North Americans.

2. Arrange to display and demonstrate the mannequins, Modern Millie and Smoking Sam, to help children see the effect of smoking on the lungs. These may be borrowed from Interagency Council on Smoking and Health.

3. Show the film, Huffless, Puffless Dragon, and discuss it.

4. Individual or committee reports on reliable and unreliable sources of information about smoking.

5. Illustrate the tar content of 2 or 3 cigarettes by a tar trap experiment, and discuss.

6. Interview parents or other adults who smoke and discuss such problems as why they continue to smoke despite the health hazards, why they started, and would they start to smoke today in light of the present knowledge.

7. Study how habits are formed and investigate some ways that habits may be broken.

8. Add to the class list of health and safety rules references to smoking.

9. Examine cigarette package labeling, evaluate, discuss, and add empty cigarette pack to the display table.

10. When studying the respiratory system, use a transparency or drawing to show how inhaled smoke reaches the lungs, enters the blood and circulates around the body. Explain how smoking may interfere with oxygen intake and how oxygen is essential to endurance and excellence in sports.

11. Make a dual display: Cigarette ads which appeal to emotions and often use false premised, and the scientific facts. Compare and discuss.

Lesson 4

Concept

1. Alcoholic beverages are used by many people for religious, ceremonial, social, dietary, and other reasons, and by some people not at all.

2. There are legal as well as health reasons why children should should not use alcoholic beverages.

3. Alcohol may be classified as a food but is best classified as a drug.

Learning opportunities

1. Discuss and compare family, ethnic, religious, ceremonial and social customs about drinking.

2. Discuss the reasons some people and some religions prohibit the use of alcohol.

3. Using visuals of the circulatory and nervous systems explain how alcohol travels through the body.

4. Have a committee look up the food and caloric value of alcohol. Compare with typical foods of the Basic Four. Explain why the calories in alcohol are "empty calories" which produce heat and energy but give no nutritional value, vitamins, or minerals.

5. Show the filmstrip, Alcohol and You, part 1, and discuss.

6. Discuss with the children that some adults drink excessively and compulsively. These people are sick and need treatment and understanding by their families and friends. Alcoholism is treatable, is preventable if onenever starts to drink, and is a major health problem, particularly in San Francisco. (One out of 4 to 6 families have at least one member who is a problem drinker)

7. Explain why alcohol is a depressant drug. Add a picture or visual on alcohol to the display or bulletin board. Explain simply that in some people depressant drugs, including alcohol, "release their brakes" so that such people may act as if they had taken a stimulant.

8. Add to the list of health and safety rules some reference to alcohol and alcoholic beverages, particularly as this pertains to children.

9. Discuss that alcohol is the second most common liquid, and that it has wide uses other than as a beverage.

Lesson 5

Concepts

1. Some common substances contain volatile chemicals which, if inhaled, can cause illness.

2. Some common plants are poisonous if ingested.

Learning opportunities

1. Identify common household substances which contain dangerous volatile chemicals.

2. Explain the word "volatile" in simple terms, and review how inhaled substances enter the lungs and then the blood and then travel throughout the body.

3. Discuss the correct uses of these hazardous substances, stressing that if used according to directions and with caution, they are useful.

4. Have children read aloud the cautions and warnings on containers of substances such as some glues, spot remover, bleach, lighter fluid, etc. Have children explain the warnings in their own words.

5. Procure visuals of some common plants which may be poisonous if ingested, e.g., seed packets or pictures or samples of plants such as sweet peas, oleander, fox glove, castor beans. Discuss the responsibility of an older child in the family for protecting a younger child (or pet) from harm by ingestion of these plants.

6. Individual and committee reports on poison control centers in San Francisco, and on first aid for suspected poisoning.

7. Add to the list of health and safety rules references to volatile chemicals and poisonous plants.

8. Summarize the unit:

    a. Review and edit health and safety rules, send them home for parent suggestions, revise and post a class set on the bulletin board in the hall.
    b. Review and possibly revise the display of drugs and hazardous substances. Which samples could possibly be classified under more than one heading? Why?
    c. Have children make posters, drawings, collages or other visuals which summarize what they have learned.

9. Write a class thank-you note to resource persons.

Evaluation

1. Plan a program, for an assembly or parent's meeting.

2. Make a bulletin board display for the hall.

3. Ask for parent comments on home discussions which were sparked by the unit.

4. Dismantle the display on the bulletin board, mix up the items, and have committees or individuals reassemble under correct categories.

5. Have children prepare a "news release" for parents explaining the current facts about the hazards of smoking.

6. Ask pupils to evaluate the unit, make suggestions for its improvement, and write or state additional questions they would like to have answered.

GRADE 5

Objectives

To help pupils

1. expand their understanding that drugs and other substances may be helpful and may be harmful
2. identify common drugs and other substances which are potentially harmful if unwisely or incorrectly used
3. to learn that wise decisions involve a thoughtful consideration of parental wishes, religious beliefs, scientific facts and expert opinions, self-understanding, social responsibility, and self-control
4. become acquainted with some of the laws about drugs
5. develop and maintain respect for these laws
6. communicate with their parents about their study of drugs and hazardous substances.

Lesson 1

Concepts

1. There are a variety of reasons some people abuse or misuse drugs, some of which are emotional in nature and some of which are related to carelessness and ignorance.
2. Some common household and garden substances, if unwisely or carelessly used, can cause illness and even death.
3. There are important differences between over-the-counter and prescription drugs.

Learning opportunities

1. Add to and review the display of hazardous substances. You may include such substances as furniture polish and wax, certain detergents, lighter fluid and butane cartridges, mothballs, insect killers, drain cleaners, paint thinners, gasoline, hair spray or roll-on deodorants. Be sure the containers are empty and the labels are intact. Make similar displays of over-the-counter drugs and prescription drugs, such as aspirin, no-doz, and dramamine, antibiotics, cough sirups.
2. Have children read labels aloud, helping them understand and interpret cautions, warnings, and directions for safe use.
3. Discuss whether the warning and directions are adequate and whether they are printed in large enough type and in a conscious place.

4. List all of the substances in the display which should be kept in a locked cabinet and/or where younger children could not reach them.

5. Discuss alternatives to taking unprescribed drugs for common ailments like headaches, sleeplessness, fatigue.

6. Discuss prescription drugs some of the children may take for conditions such as allergies, hay fever, infections, etc., stressing the importance of following the physicians orders and not sharing presciption drugs with others.

7. Construct a class letter to parents describing the unit and inviting them to visit the class, and to talk with their children at home about their beliefs and wishes concerning their children's use of medications, tobacco and alcoholic beverages.

8. Start a list of health and safety rules for 5th graders concerning the proper use of drugs and hazardous substances they will study. Have a committee or monitor add to this list each day. Parents may be asked to evaluate the list and help improve it.

9. Consult the health text, teachers' edition, for additional suggestions and reading assignments.

Lesson 2

Concepts

1. There are desirable and legitimate uses for stimulant and depressant drugs.

2. If misused or abused, stimulant and depressant drugs are dangerous to health and to society.

3. Certain common ailments and discomforts may be relieved by the wise use of certain drugs.

Learning opportunities

1. Read and discuss pp. 3,6,9, in About Drugs.

2. Use an opaque projector to show examples of stimulants and depressants in the pamphlet, Drugs of Abuse, or show slides or drawings of these drugs. Point out that the color, shape and form are clues to their contents, but that these clues are for use by trained professionals.

3. Make a chart of commonly used stimulant and depressant drugs and their legitimate uses. Include the drugs in coffee, tea, chocolate, cola drinks.

4. Discuss some common ailments and complaints that the drugs listed on the chart such as allergies, colds, relief of pain, clearing air passages, soothing rashes, killing germs.

5. Read and discuss pp. 2,5,8,11, in About Drugs.

6. Invite a physician, pharmacist, or school nurse to talk with the class about wonder drugs and their legitimate uses.

7. Show and discuss the FDS-Popular Science set or transparencies, Drugs and Your Body.

Lesson 3

Concepts

1. Current research shows that smoking cigarettes is a very dangerous practice which can lead to serious illness.

2. Advertisements about cigarettes are not always entirely truthful or accurate and appeal to emotions rather than reason.

3. Alcohol is the most commonly used depressant.

4. Alcoholism is a major health problem of adults and a major social problem or our city, state, country, and the world.

5. Alcoholism is a disease which can be treated.

Learning opportunities

1. Read and discuss pp. 12,13,14, in About Drugs.

2. Discuss the current status of proposed restrictions on cigarette advertising.

3. Evaluate the cigarette ads in the mass media for their scientific bases and emotional appeals. Which magazines in the library or at home do not have cigarette ads? Which radio or TV stations will not accept this advertising?

4. Examine the warning on cigarette packages and discuss it.

5. Have a committee or panel summarize the current research about the dangers of smoking.

6. Show the film, Smoking, Past and Present, and discuss.

7. Discuss why smoking in bed by adults is dangerous.

8. Invite a junior high school or senior high school athlete or coach to talk to the class about smoking and athletic excellence.

9. Read about alcohol on pp. 18,19,20 in About Drugs.

10. Show the filmstrip, Alcohol and You, Part 2. You may wish to review or re-show part 1, which is suggested for the 4th grade.

11. Distinguish between adults who drink moderately, those who occasionally drink excessively, and those who frequently drink compulsively and/or excessively, i.e., differentiate between drinking, intoxication and alcholism. Stress that alcoholism is a disease which can be treated, and that alcoholics are sick people who need treatment not scorn.

Lesson 4

Concepts

1. Marijuana is an illegal drug which is dangerous to health because its effects are unpredictable.

2. Experimentation with marijuana involves breaking the law and risking serious consequences.

Learning opportunities

1. Read about marijuana in About Drugs and other references and discuss:

   a. How to identify a marijuana plant, or a reefer or joint
   b. How marijuana is processed for smoking and why and how it is often adulterated
   c. How the hemp plant is an example of a plant which is useful (source of raw materials for rope) and also dangerous.

2. Report on the principal sources of supply for marijuana which illegally enters our country and city.

3. Discuss the unpredicatablility of the effects of marijuana.

4. Report on what is meant by psychic dependence, physiologic dependence, and tolerance.

5. Borrow the Winston kit from one of the junior high school drug resource teachers. Have student committees explain the charts and materials for the class.

6. Use an opaque projector or overhead projector to show marijuana plant, leaves, reefers, lids,etc., and warn children to talk with parents or other responsible adults if they see any of these objects in the neighborhood.

7. Burn a wafer of synthetic or mock marijuana to acquaint pupils with its .o.der. Break wafer into two unequal parts. Place un-

ignited smaller portion in an ashtray, pie tin or small dish. Ignite the larger portion and place it on top of the smaller portion. Explain why even the law enforcement agents cannot use real marijuana to demonstrate its odor to teachers, parents or anyone.

8. Invite a policeman to tell the class about his first-hand experiences with elementary school-age children who have been involved in marijuana.

9. Show some of the transparencies in the FDA-Popular Science set, Drugs and Your Body and relate them to how marijuana may affect the body and mind.

10. Explain the laws about marijuana in simple terms.

Lesson 5

Concepts

1. Sooner or later each child will have to make his own decision about his use of tobacco, alcohol, and drugs. Making such important decisions involves consideration of scientific facts and expert opinions, understanding of parental and religious beliefs, and awareness of one's own attitudes toward one's self and others, and towards these substances, an understanding that each person must assume responsibility for his own actions, and maintenance of self-respect and respect for one's body and mind.

2. There is often a conflict between conformity and non-conformity, or between what a person knows is right and the pressures of friends and other influences.

3. Laws about drugs protect the individual and society and should be respected and obeyed.

Learning opportunities

1. Discuss why it is sometimes so difficult to do what one believes is right, even if he wants to do so.

2. Discuss in small groups, make class reports, summarize:

   a. Why do some people hesitate to take a stand on what they know is right?
   b. How do parents and one's religion influence our decisions?
   c. How do our friends, and older boys and girls, influence our decisions?
   d. If there are conflicts between the generations in beliefs, how can the conflict be resolved?
   e. What are my responsibilities as a fifth grader for making decisions about serious matters such as experimenting with

drugs? If I make the wrong decision what may be the consequences to myself, my family my friends?

3. Discuss the need for making independent decisions when friends or older boys and girls pressure you into doing things your parents disapprove of.

4. Discuss why conformity and non-conformity may be dangerous for some people, but not for others, as this may pertain to smoking, drug use, or drinking experimentation.

5. Discuss what is meant by self-respect and how self-respect encourages respect from others:

    a. Self-respect requires being realistic about one's potential and limitations, and also requires self-confidence.
    b. Working and playing with others helps one understand himself better.
    c. Evaluate the Golden Rule as a basis for developing a code of personal conduct.

6. Use an opaque projector to show the chart, "State of California Narcotics Penalties." Stress that a person can be apprehended and arrested for being in the same room or car with a drug user, even though he may not be using drugs himself.

7. Invite a probation officer, social worker, psychologists, lawyer or narcotics agent to talk with the class about their experiences with boys and girls who have been arrested for using drugs unwisely and illegally.

8. Summarize and evaluate the unit.

Evaluation

1. Make a set of rules for the safe use of common household substances which may be potentially hazardous.

2. Do the same for over-the-counter and prescription drugs.

3. Role-play or develop a skit:

    a. Ways a 5th grader should behave if offered a reefer, alcoholic beverage,cigarette,by a classmate or older child.
    b. Different viewpoints of families, religions and other influences about medications, alcoholic beverages, smoking. Stress advisability of compliance with the standards of one's own family if in a conflict situation.

4. Make a collage, mural, posters, or other visuals about one or more of the following: health hazards of smoking, inhalation of volatile

chemicals, safe storage of hazardous household and garden substances, reading and following directions on labels of drugs.

5. Have a panel discussion on the drug laws and the reasons for respecting them.

6. Make tape recordings of cigarette commercials, evaluate them in light of the scientific facts.

7. Parent and teacher observation of self-responsibility of children when confronted with a decision-making situation.

GRADE 6

Objectives

To help pupils

1. recognize the experimentation with any hazardous substance may lead to serious consequences, some of which may not be reversible
2. reinforce their knowledge about the hazards of cigarettes and help them to conclude that not starting to smoke is a wise decision
3. understand the synergistic effects of combining certain drugs
4. recognize that there are risks inherent in taking any drug
5. become more familiar with the legal controls on drugs
6. conclude that the subject "drugs and hazardous substances" is a highly complex one that involves may fields of study such as science, psychology, sociology, law, medicine, history, economics and others.

Lesson 1

Concepts

1. Drugs and hazardous substances can be classified in several ways, and an understanding of a classification scheme by the drug's actions on the body and mind helps one identify and recognize substances which may be harmful if improperly used.
2. Some legitimate purposes of drugs are to prevent certain diseases, to alleviate the discomfort of some ailments, and to cure some diseases.

Learning opportunities

1. Find out what the children already know by written or oral pretest. Refer to suggestions given in the lesson plans for grades 4 and 5 starting the unit.
2. Assign reading on the action of drugs in the pamphlet, About Drugs, and ask individuals or committees to summarize what they have read in their own words.
3. Make charts showing familiar drugs which have legitimate uses and are relatively safe if used wisely.
4. Show visuals or use chalkboard to review classification and identification of drugs studied previously.

5. Identify drugs familiar to some of the children which are used to prevent illness, such as vaccines, drugs used to treat or cure illness, such as antibiotics or insulin, and drugs used to alleviate discomfort, such as aspirin.

6. Assign research reports on scientists who discovered certain vaccines, antibiotics, and other drugs the children may be familiar with.

7. Using encyclopedias or other references assign research reports on how antibiotics control infections and how vaccines prevent infections and disease.

8. List several diseases which are preventable by inoculations.

9. Ask a resource person such as the school nurse, science or health resource teachers, or a doctor, to explain the precautions trained medical personnel take to prevent infection when administering inoculations.

10. Show the filmstrip/recording, Drugs: Helpful or Harmful, and discuss.

11. Have pupils start a handbook on drugs and hazardous substances in which each day's lesson is summarized.

12. Refer to health text, teacher's edition, for additional suggestions and assignments.

Lesson 2

Concepts

1. The chemicals in over-the-counter, prescription and illegal drugs are circulated to every cell in the body by the circulatory system and may affect the brain and other vital organs.

2. Cigarette smoking over a period of time can cause lung cancer and circulatory impairment.

3. Excessive, prolonged, and/or compulsive use of alcohol and some volatile chemicals, like those contained in certain common subtances, may temporarily or permanently affect the vital organs.

Learning opportunities

1. Review the central nervous and circulatory systems. Present a simple explanation of the autonomic nervous system.

2. Show the film, Drugs and the Nervous System, and discuss.

3. Using the transparencies in the Body Systems Teaching Kit, review how drugs and other chemicals travel through the body by the blood and may damage the brain and nervous system.

4. Have pupils report on articles in the newspapers on drug abuse.

5. Procure from Interagency Council on Smoking and Health several copies of recent pamphlets on cigarette smoking and lung cancer and circulatory impairment. Assign reading, make reports to class by committees or panels.

6. Interview a doctor. Ask him why so many doctors have stopped or curtailed their cigarette smoking in the past few years. Does he have a "No Smoking" sign in his office? Ask him why or why not?

7. Interview an adult who smokes and who also knows the facts about the dangers of smoking. Ask him why he continues to smoke.

8. Using transparencies or other visuals, explain how prolonged, excessive or compulsive use of alcohol or volatile chemicals such as found in substances like glue, gasoline, hair spray, can temporarily or even permanently damage the brain, liver, heart, kidneys and other vital organs.

9. Assign a committee report on Alcoholics Anonymous and allied organizations.

Lesson 3

Concepts

1. Some drugs alter the functions of the mind and may even cause genetic damage by damaging chromosomes.

2. People who abuse or misuse drugs give a variety of reasons for doing so.

Learning opportunities

1. Assign reading in the pamphlets, the Up and Down Drugs, Narcotics, and About Drugs.

2. Have a committee report on the history of LSD.

3. When studying genetics in science, summarize the research evidence that indicates that there may be a link between the use of some drugs and genetic damage linked to damaged chromosomes.

4. Refer to the 5th grade lesson plan, number 5, on decision making, and reinforce this instruction by discussions, role-playing,

or other means designed to help children make wise decisions based on wholesome influences rather than impulse, or a desire to avoid being called "chicken."

5. Develop a class set of reasons that might be given by older boys and girls in support of experimenting with cigarettes, alcohol or drugs. Make another and parallel list which cites the scientific evidence which refutes the reasons given. Make a third and parallel chart citing socially acceptable modes of behavior when children are urged to experiment with hazardous and illegal substances by older youth.

6. Assign reading of the pamphlet, Marijuana. In the follow-up discussion emphasize that marijuana's unpredictability, the risk of psychologic dependence, the illegality and the association with law-breakers are important reasons for avoiding it.

Lesson 4

Concepts

1. Careless or deliberate misuse of substances which contain certain volatile chemicals may result in serious and even permanent ill-effects.

2. Taking two or more of certain drugs at the same time may more than double their effects and is very dangerous.

3. Many over-the-counter drugs are misused and can produce dependency or serious illness.

Learning opportunities

1. List some common substances which contain hazardous volatile chemicals, e.g., hair spray, roll-on and spray deodorants, gasoline, glue and others. Help the children define the word volatile.

2. Explain how the accidental, careless or deliberate misuse of volatile chemicals can trigger flash-outs, nervous system and brain malfunction, and, in rare instances, blood abnormalities such as aplastic anemia, and damage to the liver, kidneys, spleen and other organs.

3. Role play a situation in which a child is dared to experiment with volatile chemicals or dangerous drugs. Discuss the slang term "chicken." Help children understand that non-conforming to peer pressures is a sign of strength rather than weakness, if the actions are contrary to parental wishes and their own good judgment.

4. Explain the synergistic action of certain drugs and chemicals in simple terms; e.g., a pain killer such as codeine which a dentist

might give a patient, if ingested with wine or beer, will have faster and more severe effects than either taken alone; the effect may be that of a geometric progression rather than a simple doubling.

5. Invite a pharmacist to talk about synergistic effects of drugs; or a dentist to talk about the drugs he uses routinely and why he cautions patients about taking them with alcoholic beverages.

6. Ask a neighborhood pharmacist if he would permit a committee to visit his drugstore and ask questions about over-the-counter and prescription drugs.

7. Make a display of empty, labeled containers of over-the-counter and prescription drugs. Include such products as aspirin, Alka-Seltzer, No-Doz, Sominex and other advertised proprietary medicines. Discuss that although aspirin is one of the safest drugs, there are risks involved in using it, especially for children.

8. Have a pupil look up the poisons which most commonly affect children and report to the class. Discuss some antidotes for poisoning by aspirin and other common drugs. Stress necessity for prompt medical attention.

9. Discuss why masking symptons such as fatigue and pain with unprescribed drugs may lead to serious consequences. Explore alternative behaviors or actions, stressing prevention by observance of sound health practices.

10. Tape record commercials on drugs and evaluate their appeal. Compare their claims with the scientific facts.

Lesson 5

Concepts

1. There are many laws, state and federal, and international agreements between nations, about the control of the manufacture, distribution, and sale of drugs.

2. Drugs which are illegally distributed are often adulterated.

3. The profit motive is a prime cause of illegal drug traffic.

4. Summary and evaluation of the unit.

Learning opportunities

1. Have committees report on state and federal laws about drugs, and about WHO, UNESCO, and other international agencies which are trying to control the illegal drug traffic. Differentiate between FDA and Bureau of Narcotics and Dangerous Drugs jurisdictions.

2. Invite a lawyer or probation officer to discuss with the class what happens to a youngster who is apprehended for using drugs illegally or unwisely.

3. Discuss or dramatize what a child should do if he is approached to accept a gift of drugs or asked to buy them.

4. Report on the main sources and motivations of the illegal drug traffic.

5. Discuss drug adulteration by pushers and peddlers. Relate this to the controls FDA has on legitimate drugs.

6. Discuss the "missionary zeal" of some people who believe that the use of illegal drugs is desirable. Weigh their convictions with the scientific facts and compare the professional qualifications of opponents and proponents.

7. Show the filmstrip/recording, Drugs: Helpful or Harmful as a culminating activity to which parents might be invited. Have the children lead the follow-up discussion.

8. Complete the handbooks started at the beginning of the unit, send them home for parent comment and evaluation; revise if necessary.

9. Ask the pupils to evaluate the unit, suggest improvements, and write or state questions they still would like answered.

Evaluation

1. Plan and put on an assembly program for 4th or 5th graders and parents.

2. Make a mural, collage or bulletin board which summarize what was learned.

3. Form a "Speakers Bureau," teams of 2 or 3 pupils who are able to talk with younger pupils about drugs and hazardous substances.

4. Construct a class code of conduct which is intended to discourage experimentation with drugs.

5. Analyze reasons frequently given by children for experimenting with cigarettes, alcoholic beverages, and drugs and hazardous substances. Compare these with the scientific facts, evaluate, and explore alternative behaviors.

6. Invite parent evaluation based on home discussion that may have been triggered by the unit.

7. Parent and teacher evaluation of pupil compliance with the laws and with parental wishes when confronted with temptations to experiment.

ADDITIONAL CLASSROOM ACTIVITIES, GRADE 6

This list of suggested activities is designed to provide additional opportunities for pupils to gain wholesome knowledge about the drug abuse problem.

1. Study about the contributions which drugs have made to the well being of man.

2. Learn the natural sources from which drugs are derived and how the benefits of these drugs were discovered.

3. Make drawings of plants from which life saving drugs are derived.

4. Write stories concerning the benefits of drugs.

5. Report on the lives of famous health scientists who discovered life saving drugs.

6. Draw a marijuana plant, and compare its characteristics with those of similar plants. Note the difference in structure of the leaf. Identify other poisonous or dangerous plants which may be found in the community.

7. Prepare a booklet on drug information and safety to be submitted to the school library or shared with pupils in other rooms.

8. Role play situations in which one person attempts to coerce others into experimenting with a substance. (i.e. - user, pusher, highs, or freak-outs)

9. Prepare charts and drawings which suggest reasons why people experiment with narcotic drugs and other harmful substances.

10. Draw a diagram of the circulatory system and illustrate how drugs are carried to all parts of the body.

11. Establish a question box. Write a question, and place it in the box. Select a panel of pupils to discuss the questions and their answers. Invite the school nurse to serve as a resource person.

12. Demonstrate the effects of alcohol on a small animal (mouse, frog) by injecting a very small amount of alcohol and observing coordination, movement and behavior.

13. Make a "Question Man" out of cardboard with pockets for pupils questions.

VOCABULARY ... Simple definitions for pupils

1. Drug. Chemicals which may affect body structure or function, or alter behavior and which if used legitmately and wisely, may prevent, treat or cure illness.

2. Drug misuse or abuse. Mistreatment if the body or mind by the improper or excessive use of drugs.

3. Dependence. A compulsion to take drugs.

4. Tolerance. A tendency to need increased dosage to obtain the desires of desirable effect.

5. Depressant. A substance which speeds up the normal activities of the body or mind, "down" drugs, or "downers".

6. Stimulant. A substance which speeds up the normal activities of the body or mind, "up" drugs, or "uppers".

7. Tranquilizer. A substance which has a calming effect on the mind.

8. Hallucinogen. A substance which may cause a person to experience unreal sight, sounds of feelings; e.g., LSD.

9. Narcotic. Medically, a substance which induces sleep or masks pain; legally, a classification of certain of the most hazardous drugs; e.g., morphine, heroin.

10. Amphetamines. A chemical family of stimulant drugs which mask fatique, or depress appetite; e.g., pep pills, reducing pills, "speed".

11. Barbiturates. A chemical family of depressant drugs which induce relaxation and sleep, e.g., sleeping pills.

12. Inhalant. A substance which, if inhaled in large amount, may cause intoxication or unconsciousness; e.g., certain glues.

13. Over-the-counter drug. A drug which may be purchased without a prescription; commonly called OTC drugs; e.g., aspirin.

14. Prescription drug. A drug which may be purchased only if prescribed by a physician.

INFORMATION ABOUT ALCOHOL

GENERAL INFORMATION

1. The chief alcoholic beverage consumed in this country is beer, followed by the distilled liquors, with the wines a distant third. Americans spend about one out of every eight food dollars for alcoholic beverages.

2. About two-thirds of the people in the United States over 15 years of age drink to some extent. In San Francisco, it is estimated that 9 out of 10 people over 16 drink at least occasionally.

3. Many nationwide surveys show that about 67% of the high school students sampled have had some experience drinking as did almost half (48%) of the grade school students. Local authorities believe that in San Francisco the percentage is higher than the national norms.

4. Most students have already made the decision whether or not to drink by the time they graduate from high school.

5. Regional, subcultural and ethnic drinking patterns are clearly reflected in the drinking habits of adults.

6. The family is a dominant force in determining future drinking patterns of their children.

UNIQUE RISKS OF TEEN-AGE DRINKING

1. Since they are generally smaller and consequently weigh less, adolescents are affected more quickly and more severely by alcohol than adults.

2. The intense emotional response to situations characteristic of adolescents predisposes this group to be more susceptible to psychological intoxication to the extent that even one drink may result in erratic behavior.

3. The use of alcohol by adolescents as a means of coping with conflicts prevents the development of skills needed to solve the many problems of daily life.

4. The body tends to reject foreign substances on initial contact with the result that adolescents are more likely to become ill after drinking than are adults who have been accustomed to alcohol.

5. Recently learned skills are adversely affected by even small amounts of alcohol so that the combination of inexperienced drivers and inexperienced drinkers constitute a potentially dangerous situation.

6. The use of alcohol may reduce the desire for foods of adequate dietary value, at a time when rapid growth necessitates the maintenance of good nutritional practices.

NATURE OF ALCOHOLIC BEVERAGES

1. Ethyl alcohol is the principal intoxicating agent of most alcoholic beverages.

INFORMATION ABOUT ALCOHOL

2. The non-distilled alcoholic beverages such as wine, beer, ale, port, and stout are created through a process called fermentation.

3. Fermentation will not produce alcoholic beverages over 15%. In order to produce beverages with alcoholic content over 15%, a process called distillation must be employed or more alcohol must be added as is the case in making fortified wines such as port or sherry.

4. Distilled beverages such as whiskey, brandy, rum and vodka are made by collecting the steam which is a product of boiling a starchy substance.

5. Although alcohol may be classified as a food, it is a poor food from a nutritional standpoint because it lacks vitamins and minerals. Alcohol does release heat and energy. It liberates more calories than carbohydrates and less than fats.

METABOLISM OF ALCOHOL

1. Absorption is the process whereby food from the stomach progresses to the bloodstream. The rate of absorption may be affected by food in the stomach, speed of drinking, choice of beverage, and many other variable factors such as the condition of the liver, the presence of drugs, malnutriton, and whether or not alcohol is taken with food.

2. Oxidation is the process by which the dissolved alcohol in the blood is mixed with oxygen resulting in the release of heat and energy. During this process the alcohol undergoes changes in the liver before it is converted to heat and energy. Each individual burns alcohol at his own unique rate. This rate is in part affected by body size Large individuals can usually consume more alcohol than smaller persons without undue effects because they have more fluids in their bodies in which the alcohol is diluted.

SOME EFFECTS OF ALCOHOL

1. Alcohol is not a stimulant but rather a depressant and even small concentrations affect the higher brain centers. The intoxicating action of alcohol affects the brain causing impairment of its normal functioning which in turn results in abnormal activities of the organs controlled by the brain. In small doses it has a sedative effect, in larger doses an analgesic or pain killing effect, and in even larger doses a hypnotic effect. If the dose is great enough, death may result through the paralysis of the brain centers which control breathing and heart action.

2. The exact action of alcohol on the brain remains obscure.

3. Alcohol affects the function of various parts of the body, not the structure. Organic changes may accompany chronic alcoholism because of long standing nutritional deficiencies.

4. Personality traits such as aggression, timidity, superiority or inadequacy and other expressions of feelings not normally observed

in specific individuals except when drinking, are not created by the action of alcohol but simply released as formerly suppressed characteristics of the individual's existent personality. This condition arises because of the depressant effect of alcohol on the parts of the brain which normally control inhibitions.

5. Even small amounts of alcohol may reduce one's ability to concentrate.

6. Deterioration of judgment and self-control with accompanying impairment of hearing, sight and touch is evident before any muscular decline.

7. Research studies substantiate the fact that alcohol creates a sense of well being which leads to over-confidence, inflated ego and a willingness to take a chance.

8. The detrimental effects of alcohol on manual or motor skill increases in proportion to the:
   a. complexity of the skill: the more complicated skills are adversely affected first.
   b. familiarity of the skill: newest learning is adversely affected first.
   c. drinking experience of the individual.
   d. individual capacity for self-control.

9. Alcohol increases the length of reaction time.

10. The risk of intoxication is neither enhanced nor diminished by combining different alcoholic beverages, but the likelihood of developing nausea is increased.

11. In small amounts, alcohol may increase appetite and aid digestion due to an increase in the digestive enzymes, but large amounts may result in over-acidity and discomfort.

12. The warmth attributed to alcohol occurs because of the dilation of capillaries near the surface of the skin. This is a false sensation, however, since the body temperature actually falls after this short lived reaction.

13. The lowered inhibitions and decreased anxiety level which follow drinking may increase the desire for sexual activity. Excessive drinking, however, decidedly impairs the ability to consummate such an act.

14. Assuming that conditions which affect absorption are equal, large individuals can drink more than smaller individuals before showing adverse effects since they have more fluid in the body by which to dilute the alcohol, thereby lowering its concentration. Psychological factors also significantly influence the onset of adverse behavior patterns which result.

15. Casual observations of drinking behavior point out the fact that the same amount of alcohol affects people differently. In many instances the phenomenon cannot be explained by differences in body size. In these cases the answer is most likely provided by psychological factors which are of significant

influence. The three most powerful psychological influences involve the individual's susceptibility to suggestion, his mood, and his expectations at the time of drinking. As a result, "nervousness" may be increased or decreased by alcohol.

16. Nausea or vomiting after drinking may be explained by a peculiarity called pylorospasm. This is the abnormal functioning of the valve leading from the stomach to the small intestines, causing a reverse in the normal peristalsis, or muscular contractions which move the food from the stomach to the small intestines.

17. The sedative effect of alcohol and the complicated nature of driving are incompatible. The greatest of all human traffic hazards is is an inexperienced driver who is ordinarily easily upset and who takes an unaccustomed drink or two before venturing out on the highway. Almost all teen-agers and some adults fall into this category. At least 50% of serious accidents are associated with drinking.

PROBLEM DRINKING

1. Problem drinking may be defined as the misuse of alcohol under any or all of the following conditions:
   a. on inappropriate occasions
   b. in excessive amounts
   c. with resultant behavior detrimental to the individual and his associates

2. Well over 90% of those who use alcoholic beverages do so in limited amounts on appropriate occasions and with no adverse effects.

3. Research studies indicate that one in 14 to 17 drinkers become problem drinkers, and of this group of problem drinkers one in about 17 becomes an alcoholic.

4. Problem drinking and successful family membership often are incompatible.

5. Criminologists generally agree that excessive drinking rarely is the prime cause of criminal behavior although many prison inmates have drinking problems.

ALCOHOLISM

1. Drinkers who become alcoholics can be described as those individuals who have lost control of their drinking habits to the extent that they are intoxicated frequently or for several hours or days at a time, drink at inappropriate times, gulp drinks, lost interest in activities other than drinking, endanger their health through preoccupation with drinking, and those who drink not by choice, but by compulsion.

2. Alcoholism is a major public health problem that affects 4 to 5 million people in the United States, or approximately 4% of the adult population. The proportion of alcoholics has not increased over the past decade.

INFORMATION ABOUT ALCOHOL

3. Alcoholism is the fourth biggest public health problem, superceded only by heart disease, cancer and accidents.

4. Alcoholism, by the definition officially adapted by the World Health Organization and the American Medical Association, is a disease. An alcoholic, therefore, is a sick person, not a criminal nor moral reprobate.

5. The rate of alcoholism in San Francisco is the highest in the nation for a city of comparable size.

6. Cirrhosis of the liver, often but not always associated with excessive drinking over a long period of time, is the 4th leading cause of death in San Francisco; in California it is 6th; in the United States, 9th. (1967 statistics, San Francisco Department of Public Health.)

7. The causes of alcoholism are still unknown. It is a complex illness which undoubtedly has biological, psychological, and sociological components.

8. Most alcoholics are not on Skid Row. Almost all of them live in typical residential districts and are employed.

9. Alcoholics are susceptible to nutritional deficiency diseases. Eight ounces of distilled liquor provides a 150 pound man with two-thirds of his caloric requirement for one day. Typically, the heavy drinker is disinterested in food because his caloric needs, though not his nutritional needs, have been fairly well met by alcohol.

HANG-OVERS

1. The discomfort which follows excessive drinking results from a disturbance in the equilibrium of fluids in and around the cells.

2. Time, sleep, and rest are the only cures for this condition.

3. Popular folklore that exercise, fresh air, cold showers, black coffee and such will hasten recovery from excessive drinking has no scientific foundation. A temporary exhilaration may result from such "treatment" but the level of intoxication remains the same.

INFORMATION RELEVANT TO PREVENTING INTOXICATION

1. The only sure preventative is abstinence.

2. Drink sparingly, slowly, and choose well-diluted drinks instead of more concentrated ones.

3. Eat before and during drinking. Foods eaten with drinks "insulate" against the rapid effects of alcohol. Proteins are more effective for this purpose than fats or starches.

4. Carbonated dilutants, such as soda water, speed the action of alcohol; water used as a mix slows down alcohol's action.

5. The effects of alcohol are felt more quickly at high altitudes than at sea level.

6. Small individuals who do sedentary work will feel the effects of the same amount of alcohol more quickly than large individuals who do hard physical labor.

7. If you must drive after drinking, wait at least one hour after the last drink before taking the wheel. This time lapse permits the body's oxidation mechanism to catch up and thus utilize the alcohol.

8. Taking drugs or medicine of any kind with an alcoholic beverage is extremely risky because of the synergistic effects of many drugs. For example, a highball plus a sedative may not be just twice as potent as either alone; it may be at least four times as potent.

SUGGESTIONS FOR TEACHING ABOUT ALCOHOL

1. Since today's youth will probably follow the example of their elders, most of them will drink to some extent at some time in their lives. Along with pointing out the legal aspects and mental health advantages of abstinence during adolescence, teach enough about alcohol's varied effects so students will understand how to minimize the risks of intoxication when and if they or their associates ever drink.

2. Distinguish clearly between drinking, drunkenness, and alcoholism. The first is a social custom acceptable to most adults or appropriate occasions. The second is rarely socially acceptable and is always risky. The latter is a disease or disorder.

3. Since young people are more interested in the prsent than the future, concentrate on the subject of "drinking" rather than alcoholism. Older teen-agers will be more interested in alcoholism as a social problem than as a threat to themselves in later life.

4. Be sure students know where to get help for alcohol-related problems. Among the resources are medical and religious advisers, Alcoholics Anonymous (for adults with alcohol-related problems), Alanon (for family members of all ages who have a loved-one with an alcohol problem), and Alateen (for teen-agers with an alcohol problem).

5. Emphasize that the most immediate effects of alcohol are impaired judgment and diminished inhibitions. Tie this in with discussion of dating behavior.

6. Help the student realize that drinking never solves any problem and frequently creates new and more serious problems.

7. Impress the students with the fact that an alcoholic is a person who is ill and in need of treatment and understanding rather than censure.

Reference:
F. Todd, Teaching About Alcohol

INFORMATION ABOUT DRUG USE AND MISUSE

THE DRUG MISUSE PROBLEM

Arrests of California juveniles for drug offenses increased 24% over the five year period 1961-1966. In San Francisco, juvenile arrests increased from 9 in 1963 to an overwhelming 167 in 1966, representing an increase of well over 1500%. The average age of the offenders is 16 years. Law enforcement agencies believe that arrest statistics represent only an extremely small percentage of the actual incidence of illegal juvenile drug usage.

TERMINOLOGY

1. **Drug:** any non-food substance, medicinal or non-medicinal, which may be potentially harmful to the individual or society.

2. **Drug misuse:** self-administration of any drug to the extent that the individual or society may be harmed.

3. **Dependence:** according to the World Health Organization, dependence means "a state arising from repeated administration of a drug on a periodic or continual basis". The terms "addiction" and "habituation" are no longer used by most authorities. The use of the more general term, "dependence", requires delineating the exact drug which one is discussing, e.g., drug dependence of the opiate type.

4. **Tolerance:** a physiological condition whereby the drug user is forced to increase steadily the dosages of the drug to realize the desired effects.

OPIATES

1. **Medical use:** relief of pain.

2. **Examples:** morphine, codeine and other opium derivatives, heroin (produced synthetically from morphine), percodan.

3. **Usual method of use:** intravenous injection.

4. **Effects:** drowsiness, sleep; **side effects:** nausea, vomiting, constipation, itching, constriction of pupils, slow breathing.

5. **Heroin.**

   a. Produces "high" or "kick" of almost orgasmic nature, followed by "nod" or state of euphoria or oblivion.
   b. Withdrawal symptoms severe.
   c. Diminishes sexual desire and activity.
   d. Tolerance develops quickly.
   e. Damage to tissues is rare.
   f. Rarely used by school-age youth.

6. **Opiates in cough syrup**

   a. Use by youth believed fairly common, but difficult to assess extent accurately.
   b. Many cough syrups containing opiates also contain an emetic which tends to reduce change of dependency.

INFORMATION ABOUT DRUG USE AND MISUSE

DEPRESSANTS: Barbiturates and Tranquilizers

1. Barbiturates: (commonest drug which produces dependence)
    a. Medical uses: sedative, sleep producer, control of disorders such as epilepsy, high blood pressure, gastrointestinal illnesses.
    b. Examples: drugs under trade names of seconal, amytal, nembutal.
    c. Safety: usually safe if used exactly as prescribed.
    d. Usual form: pills, capsules.
    e. Symptoms of abuse: intoxication similar to that of alcohol; slurred speech, staggering gait, sluggish reactions, erratic behavior, laughs or cries easily.
    f. Withdrawal from a dependent individual can cause convulsions which can be fatal if untreated.
    g. Using barbiturates and alcohol at the same time can be extremely dangerous because of the synergistic effects of the drugs.
    h. Death rate from accidental or intentional excessive use is very high.
    i. Physiological and psychological dependence may result from excessive use.

2. Tranquilizers
    a. Medical use: relief of minor mental or emotional disorder.
    b. Psychological and physiological dependence may result from excessive use.
    c. Withdrawal from dependent individual can cause convulsions which can be fatal if untreated.

STIMULANTS: Cocaine and Amphetamines

1. Cocaine
    a. Derived from leaves of coca tree.
    b. No longer used medically except as local anaesthetic.
    c. Widely used in parts of Latin-American, where dependence is common.
    d. Effects: reduction of fatigue, talkativeness, euphoria, increased muscular strength, hallucinations, followed by depression.

2. Amphetamines
    a. Medical use: treatment of obesity, depression, hypoactivity, behavioral disorders in children, excessive sleepiness.
    b. Examples: trade names such as dexedrine, methedrine or metamphetamine ("crystal" or "speed"), benzedrine.
    c. Effects: produces feeling of well-being, counteracts depression, inhibits appetite, masks fatigue, increases alertness.
    d. Effects of misuse: psychological but not physiological dependence, increased tolerance requiring dosage many times that used medically; restlessness, talkativeness, excitability, insomnia, profuse perspiration, increased urinary frequency, tremor; if used intravenously, psychotic behavior may result.

e. Frequently misused by students to stay awake to study for final examinations, and by drivers on long motor trips.

HALLUCINOGENS

1. Medical use: experimental medical use of LSD in the treatment of alcoholism and certain psycho-sexual disorders has been reported as potentially successful; other hallucinogens have no medical use.

2. Examples: LSD, DMT, peyote, psilocybin, mescaline, marihuana.

3. Effects: distorted sensory perceptions, psychological dependence; no physical dependence is believed to be produced, no physical symptoms occur on withdrawal.

4. LSD

   a. Effects: visual, auditory and tactile hallucinations, changes in perception, thought, mood, activity, time sense, comprehension; some "trips" are characterized by panic, disorientation, severe depression.
   b. Lasting effects: in some users, may include psychotic behavior, even in persons who previously exhibited no signs of emotional instability.
   c. Recurrence of psychotic effects may occur weeks or months after dosage.
   d. Epileptic seizures may be triggered.
   e. There is some evidence that genetic damage may occur and adversely affect progeny.
   f. Claims by proponents of improved functional efficiency and expanded consciousness have not been proven by objective investigation; on the contrary, impaired functioning results.

   g. Many suicides and other acts of violence have occurred while individuals were under the influence of LSD.
   h. Patterns of LSD usage: many adolescents are particularly interested in LSD since this is the age group in which the search for identity, exploration, attempt to achieve adult status through rebellion against society, and the seeking of solutions to personal conflicts, plays such a significant role. They believe LSD may provide the solution to one or more of these problems. Newspapers, television, radio, and even prominent persons have glorified LSD to the extent that pushers merely have to supply the drug to customers rather than persuade or induce them to indulge in its use. Dr. Sidney Cohen classified the LSD user as follows:

      (1) The Explorer: curious to experience sensory awareness characteristic of the drug.
      (2) The Social LSD Takers: provides a common bond for sense of belonging.
      (3) Hedonistic Group: takes the drug for kicks. Among this group are those who are dissatisfied with reality. LSD is used as a means of withdrawal and continuous escapism.
      (4) Magic Pill Group: hope LSD will cure them of what they really are:

emotionally immature individuals who are probably pre-psychotic.

(5) Artistic Group: attempt to see things differently through altered perception; common throughout history.

(6) Religious Seekers: believe LSD provides answers to questions about the universe and solutions to one's personal problems.

(7) Accidental Takers: this group usually consists of children but also includes some adults who have been given the drug without their knowledge.

5. Mescaline, psilocybin, peyote, DMT produce effects similar to LSD, but the effects are usually less intense and are of shorter duration.

6. MARIHUANA

a. Medical use: none.

b. Usual method of use: smoked or eaten.

c. Effects: psychological dependence, particularly in susceptible individuals, distortion of sense of time and distance; euphoria; feeling of exaltation; dreaming; and sometimes hallucinations; panic or fear may result; user may be very talkative, or very quiet and drowsy; effects are unreliable and unpredicitable.

d. Physical dependence, abstinence syndrome, physical damage do not develop.

e. In San Francisco, 59% of the juvenile drug arrests involved marihuana users. (1966)

f. Harm to society is derived from economic consequences of the impairment of the individual's social functions and his enhanced proneness to asocial and antisocial behavior.

SOLVENTS

1. Examples: glue, gasoline, paint thinners, lighter fluid, coolants and other volatile chemicals.

2. Effects: state of excitation and exhilaration similar to alcoholic intoxication, often characterized by blurred vision, slurred speech, loss of balance, black-outs; prolonged use may result in anemia, mental deterioration, liver damage, and death.

3. Users sometimes use plastic bags to hold the glue or solvent up to their face, thus risking suffocation.

4. Misuse is usually limited to individuals in late childhood or early adolescence, and is most frequent among children with a history of delinquent behavior.

SOCIAL ASPECTS OF DRUG MISUSE

1. Society should accept the existence of and differentiate between the occasional or spree drug user and the chronic abuser to whom drug abuse is a way of life.

2. The chronic abuser is a sick individual and should be treated as such.

INFORMATION ABOUT DRUG USE AND MISUSE

3. Drug misuse is a sympton of a deep, underlying disorder; it may range from teen-age rebillion to sever disorders, and is often characterized by loneliness and alienation.

4. Legal restriction on drugs has been part of society since the dawn of history and is a social necessity.

5. The family is the prime influence on the prevention of drug misuse by the young. Parental love, care, and guidance particularly during the years of late childhood and adolescence, insulate the child against loneliness and alienation, and usually young people thus influenced have no need to escape by means of drug misuse.

TIPS FOR TEACHING ABOUT DRUG USE AND MISUSE

1. Aim for an honest balance between the conservatively alarmist and the defiantly radical. Differentiate between facts, beliefs, and opinions.

2. Narrow the communication gap between the generations:
   a. Be familiar with the sources from which teen-agers get their information as well as the sources teachers consider prestigious.
   b. Know the jargon of teen-agers and the drug-using subculture.
   c. Let pupils air their views freely in an atmosphere of mutual curiosity and a sharing of opinion and experience.
   d. Listen and look for differences between pupils' words and actions and their underlying needs and motives.
   e. Be constantly aware that social attitudes which create undue stress situations may do more lasting harm than a one or two time use of most drugs.

3. Guide pupils to differentiate between:
   a. Physiological effects of drugs and the influence of drugs on psychological effectiveness.
   b. Honest scientific research and pseudo-research.
   c. Medical views and moral views.
   d. The often divergent viewpoints of health scientists, criminologists, and human rights proponents.
   e. Risks inherent in the use of any drug, and the risks of known or suspected dangerous drugs.
   f. Risks and benefits of the use of dangerous drugs, short term and long term, physiological, psychological, and social.

4. Explore with pupils some of the reasons teen-agers take dangerous drugs.

5. Minimize teacher-imparted information. Substitute dialogue-centered instruction. Center activities around situations and concerns that are real or realistic to the pupils.

6. Pre-test: you may be amazed at how well-informed your pupils are on a subject of deep interest to them.

7. Use examples from current mass media. Help students evaluate reporting, detect bias, identify honest onctroversy, differentiate

INFORMATION ABOUT DRUG USE AND MISUSE

between sensationalism and scientific findings.

8. Consider: Have we overstressed happiness and fun in our society? To what degree is stress related to human productivity and personal and social well-being? How does this relate to the drug subculture?

9. Explore with pupils: If a person who tuned in, turned on, and dropped out wants to tune out, turn off, and drop back, how can he be helped?

10. Know some of the reasons why marihuana is more risky than alcohol; (illegal, effects less predictable and reliable, users isolate themselves from mainstream social activities of the majority of people).

11. Gear your teaching to a realistic target group. You'll not convert the extremists. You'll probably reinforce the beliefs of many of your pupils. Your instruction is most likely to influence those who are not' too strongly committed and who are still open minded.

12. Be honest. If you don't know the answer to a question, admit it. If there are controversial answers, give all sides of the story. If pupils ask your opinion or beliefs, state them. Don't scold, threaten or exhort. Remember: few teachers but most teen-agers are under peer pressure to experiment with drugs.

13. Our young people believe in physical, material, intellectual, psychological, and spiritual fulfillment. Explore with them how drug misuse may damage or prevent their achieving self-fulfillment. Help them see that if they get "hung-up" on drugs they will have "copped-out" on themselves.

14. Finally, be aware that during the teen years acceptability as a worthwhile person is harder to come by than at any other time of life. Younger children, and adults of all age groups, do not readily accept teen-agers and their behavior. Acceptance by teen-agers of members of their own age group is even a greater problem.

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INFORMATION ABOUT SMOKING

PREVALENCE

1. A survey conducted by the Advisory Committee to the Surgeon General indicates that less than 5% of the boys and 1% of the girls smoke regularly before the age of 12. By the 12th grade, however, 40 to 55% have been found to be smokers.

2. Estimates of smoking incidence by age 25 are believed to be approximately 60% in men and 36% in women. Smoking prevalence continues to increase until age 35 or 40, after which a decline occurs, until at age 65, 20% of the men and 4% of the women are smokers.

PATTERNS OF SMOKING BEHAVIOR

1. Most authorities and studies agree that the teen years are crucial in determining smoking behavior in that the majority will decide whether or not to develop the practice during this period.

2. Smoking behavior is often strongly influenced by the permissive or prohibitive attitudes of family and friends.

3. There does not appear to be any definite "smoker personality". Certain personality traits are more likely to be observed in smokers; such as extroversion, neuroticism and a more than usual amount of psychosomatic problems.

4. Stressful or challenging experiences are believed to be factors influencing the beginning smoker as well as in reinforcing the habit and the number of cigarettes consumed.

5. The habitual use of tobacco is associated primarily with psycho-social drives which are strengthened by the drug effects on the central nervous system.

6. There is ample evidence to support the fact that the smoking habit becomes compulsive in some heavy smokers. This dependency is psychological in nature. There are no physical withdrawal symptoms which characterize physical dependence upon abstinence from smoking.

7. The motivation for using tobacco must be considerable since it is well known that among beginning smokers certain toxic or poisonous effects such as nausea and vomiting often accompany the initial usage of tobacco.

8. Statistics prove that giving up the smoking habit is extremely difficult for many individuals. Of the methods employed to cure the habit, those which deal with the psychogenic drives have been more successful.

9. It has been suggested that the most effective way to cut down on the number of smokers among young people would be to eliminate the habit among the parents, since it has been demonstrated in some studies that there is a strong correlation between parents' smoking behavior and that of their children. The similarity in children and parent habits constitutes,

INFORMATION ABOUT SMOKING

according to some authorities, evidence that beginning smoking is initiated by an imitation of and wish for, adult status.

SMOKING AND MORTALITY

1. Observations of thousands of patients and autopsy studies show that many kinds of damage to body function, organs, cells, and tissue occur more frequently and severely in smokers than in non-smokers.

2. The mortality rate for male cigarette smokers is 70% higher than for non-smokers. In general, the greater the number of cigarettes smoked daily the higher the death rate.

3. The mortality rate for smokers who inhale is greater than for smokers who do not. The mortality rate of cigarette smokers appears to be considerably higher than for pipe and cigar smokers. Smokers in the latter two categories, however, have a relatively high mortality rate for cancers of the mouth, esophagus, larynx, and lung as well as for cirrhosis of the liver and stomach and duodenal ulcer.

SMOKING AND CANCER

1. A considerable amount of experimental work in many species of animals has demonstrated that certain ingredients identified in cigarette smoke can produce cancer.

2. Research has shown that cigarette smoking is causally related to lung cancer in both men and women.

3. The risk of developing cancer of the lung for pipe and cigar smokers is greater than in non-smokers, but much less than the risk incurred by cigarette smokers.

4. The risk of developing lung cancer increases with the duration of smoking, and the number of cigarettes smoked per day, and is diminished by discontinuing smoking.

5. The mortality ratios for cigarette smokers as against non-smokers are 11 to 1 for cancer of the lung and bronchus. There is also a substantially higher risk associated with cancer of the larynx, oral cavity, esophagus and urinary bladder.

6. There appears to be no significant relationship between gastric cancer and smoking.

SMOKING AND CARDIOVASCULAR DISEASES

1. Recent studies have revealed that cigarette smokers are more prone to die of certain cardiovascular disorders than non-smokers. The studies indicate that the ratio of death from these disorders between smokers and non-smokers is about 2 to 1. This ratio is affected by the number of cigarettes consumed.

2. Although little is known regarding the composition of cigarette smoke after it leaves the mouth and enters the lungs, it is believed that it contains no less than nine gases which are believed to be irritating to the lungs. 80 to 90% of the particles contained in cigarette smoke are retained in the mouth

INFORMATION ABOUT SMOKING

and respiratory tract and lungs. Although the exact percentage is not known, it is believed that the vast majority of particles are deposited deeply into the respiratory tract.

3. Chronic brochitis is a very common condition in which excessive mucous secretion in the bronchioles causes recurrent coughing.

4. Emphysema, a frequent complication of chronic bronchitis, is a serious and often fatal disease characterized by enlared air sacs in the lung. It is the 8th cause of death in San Francisco and 10th California and the United States.

5. Chronic bronchities and emplysema are diseases of great public health importance in the United States. They are linked with the excess mortality of cigarette smokers.

SOME CONCLUSIONS

1. Cigarette smoking is the most important of the causes of chronic brochitis in the United States.

2. A relationship exists between pulmonary emphysema and cigarette smoking.

3. For the bulk of the population of the United States, the importance of cigarette smoking as a cause of chronic respiratory disease is much greater than that of atmospheric pollution.

4. Cough, sputum production, or the two combined, are consistently more frequent among cigarette smokers than among non-smokers.

5. Cigarette smoking is associated with a reduction in the efficiency of the lungs. Among males cigarette smokers have a greater prevalence of breathlessness than non-smokers.

6. Cigarette smoking does not appear to cause asthma.

7. Cigarette smokers have a moderately increased risk of death from influenza and pneumonia.

8. Although some people claim there are good effects from smoking, such as relaxation, most authorities agree that those "good effects" do not counter balance a definitely known health hazard.

STATE OF CALIFORNIA NARCOTIC PENALTIES

Narcotics	Adult Conviction	1st Offense Years	1st Offense Minimum	2nd Offense Years	2nd Offense Minimum	3rd Offense Years	3rd Offense Minimum
Heroin	Possession	2-10	2	5-10	5	15-life	15
Opium	Sales or furnishing	5-life	3	10-life	10	15-life	15
Morphine	Adult to minor Minor to minor	10-life 5 minimum	5	10-life 10 minimum	10	15-life	15
Codeine	Sale	1-10					
Dermerol							
Methadone							
Cocaine							
Marijuana							
Marijuana	Cultivating	1-10		2-20		5-life	
(Considered a narcotic under the law)	Possession for sale	2-20		5-15		10-life	
	Sale	5-life	3	5-life	5	10-life	10
	Adult to minor	10-life	5	10-life	10	15-life	15
Peyote	Cultivate/process	1-10		2-20			
	Possession	2-10		5-20	5	15-life	15
	Sale	5-life	2	10-life	5	15-life	15
Prescriptions	Forgery	6 mos.-1		10		10	
Addicts	Using/influence of	3 mos.-1					
	registration	Misdemeanor					

STATE OF CALIFORNIA NARCOTIC PENALTIES

Dangerous Drugs	Adult Conviction	1st Offense Years	2nd Offense Years
LSD, DMT, STP	Possession	$1,000 and/or 1	1-5
Depressants:	Sale (for)	1-3	2-10
Nembutal, Seconal,	Actual sale	1-5	2-10
etc. (barbiturates)	To minor	1-5	2-10
Miltown, Librium			
(tranquilizers)			
Stimulants:			
Benzedrine (Amphetamine)			
Methamphetamine (speed)			

LAWS PERTAINING TO NARCOTICS AND DANGEROUS DRUGS VIOLATIONS

FEDERAL LAWS

1. Harrison Narcotic Act of 1914 - basis of all narcotic laws
2. Import and Export Act of 1922 - this outlaws Heroin
3. Marijuana Tax Act - 1937
4. Boggs Act of 1950 - mandatory sentences for narcotic tax violations
5. Narcotic Control Act - 1956

STATE LAWS

A. Health and Safety Code (Div. 10)

(1) 11500 H & S Code - Possession of Narcotics (Heroin, Morphine, Percodan, Cocaine) (F)

(2) 11500.5 H & S Code - Possession of Narcotics with Intent to Sell (Heroin, Morphine, Percodan, Cocaine) (F)

(3) 11501 H & S Code - Sale of Narcotics (Heroin, Morphine, Percodan, Cocaine) (F)

(4) 11502 H & S Code - Sale of Narcotics to Juvenile (F)

(5) 11503 H & S Code - Offer to Sell Narcotics or Delivers Substance in Lieu of Narcotics (F)

(6) 11530 H & S Code - Possession of Marijuana/Harvesting or Cultivating (F)

(7) 11530.5 H & S Code - Possession of Marijuana with Intent to Sell (F)

(8) 11531 H & S Code - Sale of Marijuana (F)

(9) 11532 H & S Code - Sale of Marijuana to Juvenile (F)

(10) 11540 H & S Code - Possession of Peyote/Harvesting or Cultivating (F)

(11) 11721 H & S Code - Illegal Use or Under the Influence of narcotics (M)

(12) 11555 H & S Code - Illegal Possession of Narcotic Paraphernalia (M)

(13) 11556 H & S Code - Unlawful Presence or Visit Where Narcotics are Used (M)

(14) 11910 H & S Code - Possession of Dangerous Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (M) (Prior F)

(15) 11911 H & S Code - Possession of Dangerous Drugs with Intent to Sell, Amphetamine, Barbiturates, L.S.D., or D.M.T. (F)

(16) 11912 H & S Code - Sale of Dangerous Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (F)

(17) 11913 H & S Code - Sale or Furnishing Juvenile Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (Use of Minor) (F)

B. Business and Professions Code

(1) 4237 B & P Code - Forged/Fictitious/Altered Prescription (first offense (M) - second offense (F)

C. Penal Code

(1) 4573 P.C. - Bringing Narcotics Into County Jail (F)

(2) 4573.5 P.C. - Bringing Dangerous Drugs Into County Jail (F)

(3) 4573.6 P.C. - Possession of Narcotics or Dangerous Drugs in County Jail (F)

D. California Vehicle Code

(1) 12805 C.V.C. - The Department of Motor Vehicles shall not issue or renew a license to a person who is addicted to narcotics or habitually uses drugs.

(2) 13202 C.V.C. - A Court may revoke a driver's license upon conviction of any narcotic offense defined in Division 10 of the Health and Safety Code, starting at Section 11000, when the use of a motor vehicle is involved in the commission of the offense.

(3) 23101 C.V.C. - Any person driving under the influence of intoxicating liquor or combined liquor and any drug, and causes bodily injury is guilty of a felony. May be sentenced to the state prison not less than one year or in the county jail not less than one year.

(4) 23102 C.V.C. - Driving under the influence as above and no bodily harm, a misdemeanor.

(5) 23105 C.V.C. - Unlawful to drive while addicted to the use, or under the influence of narcotic drugs or amphetamine or any derivative thereof. A felony.

(6) 23106 C.V.C. - Unlawful for any person to drive under the influence of any drug, other than a narcotic or amphetamine or any derivative, must render him incapable of safely driving a vehicle. A misdemeanor.

(7) 23108 C.V.C. - Driving under the influence of any dangerous drug other than a narcotic and causes bodily injury. May be sent to state prison not less than one year, nor more than five, or county jail not less than 90 days nor more than one year. A felony.

E. Welfare and Institution Code

(1) 3100 W.I.C. - Voluntary commitment fortreatment of narcotic additic.

(2) 3100.6 W.I.C. - Involuntary commitment o narcotic addicts by health office or peace officer.

F. Harbor-Navigation Code

(1) Section 655 - Motorboat, vessel or on water-skis while under the influence of a narcotic or barbiturate. A. misdemeanor.

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SAN FRANCISCO UNIFIED SCHOOL DISTRICT

Sample Lesson Plans

DRUGS AND HAZARDOUS SUBSTANCES

Grades 7-9

For optional trial use, Fall term, 1969

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Superintendent of Schools

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

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Prepared by

Nathan Littlejohn, James Lick Junior High School
Robert Parina, Aptos Junior High School
Mary Frazier Patterson, Pelton Junior High School

Edited by

John Freeman, Balboa High School
Eugene Huber, Teacher-Specialist, Health Education
Dr. Frances Todd, Supervisor, Health Education

Under the direction of

George Canrinus, Coordinator, Health, Physical Education, Recreation
Ralph Kauer, Assistant Superintendent, Secondary Schools
Dr. Raymond Pitts, Assistant Superintendent, Instructional Development

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Information about smoking R-14

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Laws pertaining to narcotic and dangerous drug violations, federal and state R-19

References R-22

DRUGS AND HAZARDOUS SUBSTANCES

GRADES 7-9

Concept

THE USE OF SUBSTANCES WHICH MODIFY BODY FUNCTIONING, FEELINGS AND BEHAVIOR ARISES FROM A VARIETY OF MOTIVATIONS AND MAY BE BENEFICIAL OR HARMFUL

Behavioral Objectives

The student

1. describes how certain common and legal drugs modify body functions
2. cites precautions about using and storing medicines
3. differentiates between necessary and unnecessary use of drugs and medicines
4. investigates and evaluates the nature and extent of our cultural pattern of self-medication
5. concludes that substances which modify body functions range from mild to strong, have multiple uses, and produce many varied and often unpredictable effects.
6. formulates situations which illustrate the interplay of personal, social, family, and environmental influences on the use, non-use and misuse of substances which modify body functions
7. compares the psychological and social values of smoking which are claimed by its proponents with the potential detrimental effects
8. identifies reasons why some individuals experiment or may possibly become regular users of harmful drugs
9. discusses the synergistic effects of taking more than one drug at a time
10. examines the relationship between the pressures of the peer culture and the use, misuse and abuse of alcohol, tobacco, and certain harmful drugs
11. discusses the laws which control the use and sale of alcohol, tobacco, and certain drugs to minors
12. refrains from experimenting with or using harmful or illegal substances.

13. predicts that loss of inhibitions resulting from the use of alcoholic beverages may lead to behavior problems, some of which are irreversible

14. identifies community resources for aiding youth seeking help on drug-related problems.

GRADES 7-9

Outline

Grade 7 Health Education

Pressures to experiment with drugs
Legitimate and illegitimate uses of drugs
Safe use and storage of drugs
Marijuana

Grade 8 Science

Physiologic and psychologic effects of drugs on the human nervous, circulatory and respiratory systems: alcohol, nicatine and tars, hallucinogens
Motivations for drug abuse

Grade 9 Social Studies

Cultural patterns of self-medication
Narcotic dependency
Social and economic aspects of drug misuse and abuse
Community efforts to treat and rehabilitate drug dependents
Legal controls: local, state, national, international
Personal and social responsibilities

GRADES 7-9

Learning Aids for Pupils

Grades 7, 8, 9

Pamphlets

1. Marijuana, 1969
2. The Up and Down Drugs, 1969
3. LSD, 1969
4. Narcotics, 1969
   U. S. Department of Health, Education and Welfare
   50 copies consigned to each school
5. Narctics and Dangerous Drugs (Drug information and contest Flip chart), 1969
   Winston. One copy consigned to each school
6. Drugs, 1969
   Scott, Foresman, may be ordered through school librarian

A/V Aid

1. Drug Identification (Slides), 1969. SFUSD.
   One set consigned to each school

Grade 7 Health Education

A/V Aids

1. Rx: Not for Kicks, 9 min., 1968
2. Marijuana: A Foolish Fad, 10 min., 1968
3. Tobacco: The Habit and the Hazards, 13 min., 1968
   The above are filmstrips and recordings
   QED. One copy consigned to each school

Grade 8 Science

A/V Aids

1. Alcohol: Decisions About Drinking, 15 min., 1968
2. LSD: Worth the Risk?, 10 min., 1968
   The above are filmstrips and recordings
   QED. One copy consigned to each school
3. Drugs and the Nervous System (motion picture), 20 min., 1967
   Churchill. Q613.8-MS-2

Grade 9 Social Studies

A/V Aids

1. Narcotics: Uses and Abuses, 10 min., 1968
   Filmstrip and recording. QED
   One copy consigned to each school
2. I Never Looked at It That Way Before, 31 min., 1967
   Filmstips and recordings. Guidance Associates
   One copy consigned to each school

GRADE 7

HEALTH EDUCATION

Objectives

To help pupils

1. examine the relationship between the pressure of the peer culture and the use, misuse and abuse of tobacco, and certain harmful drugs

2. observe precautions about using and storing drugs when they use them legitimately

3. differentiate between necessary and unnecessary use of drugs and medicines

4. conclude that substances that modify body functions range from mild to strong, have multiple uses, and produce many varied and often unpredictable effects.

Lesson 1

Concepts

1. Drugs play an important part in the alleviation of pain and discomfort, the prevention and treatment of diseases and disorders and the extension of the life span.
2. Drugs have many effects, including side effects, on people.
3. The illegal, unnecessary or excessive use of drugs is called drug abuse or drug misuse.
4. Drugs and hazardous substances which are kept at home should be safely stored.

Learning opportunities

1. Give an oral or written pre-test to determine student's knowledge about drugs.
2. With parent's permission, inventory the medications and potentially hazardous substances found in the home, noting safe and unsafe storage practices. Discuss with parents the uses of the drugs and other substances, whether they are prescription drugs, over-the-counter drugs, or non-drug substances which may be hazardous if improperly used. Ask pupils to bring to class empty containers with their labels intact. Construct a display.
3. By committee work or class discussion, compile a class list of the substances found in various homes. Categorize them under headings such as Prescription Drugs, Over-the-Counter Drugs, Potentially Hazardous Substances. Further categorize them by their action on the body, such as Depressants, Stimulants, Narcotics, Reality-Altering drugs. Select from the empty labeled containers a few examples of medications used for the relief of headaches, pain, rashes, sleeplessness, appetite suppression, laxatives, pep pills etc. Have pupils read labels aloud, noting directions for taking, warnings and cautions, and any reference to potential side-effects.
4. Discuss methods other than taking self-prescribed drugs for preventing or alleviating the disorders mentioned in (3).
5. List any of the substances which might be drugs or substances of abuse if used improperly or excessively.
6. Discuss safe storage of drugs and hazardous substances.

Lesson 2

Concepts

1. Using drugs unnecessarily, excessively, or for purposes for which they were not intended, is drug abuse.
2. Drug advertising is often misleading.

Learning opportunities

1. Show the FS/R, RX: Not for Kicks. Select from the accompanying teacher's guide the most appropriate suggestions for follow-up discussion.
2. Some suggested subjects for individual or group disscussion and reports:
    a. Evaluation of advertising claims about the various brands of aspirin and/or the efficacy of widely, publicized proprietory medications.
    b. Evaluation of adequacy and clarity of directions and warnings on labels.
    c. Visit a neighborhood pharmacy. Ask the pharmacist what precautions he takes regarding restricted and narcotic drugs, filling and recording prescriptions, etc.
    d. Legal restrictions on prescription drugs.
    e. Uses, and misuses of "wonder" drugs such as antibiotics, sulfa drugs, diuretics, tranquilizers, antihistamines, reality modifiers.
    f. Responsibilities of teenagers for preventing the misuse or careless use of drugs and hazardous substances by younger children in the family.

Lesson 3

Concepts

1. Marijuana is an illegal drug which has no medical uses.
2. The effects of marijuana are not always predictable.
3. Experimenting with marijuana may have many adverse effects on a teenager, his family, his friends, and on society.

Learning opportunities

1. Show the FS/R, Marijuana: A Foolish Fad. Select from the accompanying teacher's guide the must appropriate suggestions for follow-up discussion.
2. Some suggested subjects for individual and group discussion and reports:

a. Why do some teenagers experiment with marijuana?
b. How would experimenting with marijuana hinder a teenager in achieving his goals in life?
c. What are the differences between psychic and physiologic drug dependence? Which is apt to be more harmful over the short term? The long term?
d. Why do some people use "crutches" such as marijuana rather than face their problems and try to solve them?
e. How can the use of marijuana among teenagers be prevented?

Lesson 4

Concepts

1. Behavior depends upon meeting emotional needs.

2. Teenagers should understand how peer pressures may adversely influence their behavior.

3. Meeting frustrations by undesirable behaviors such as experimenting with smoking and drinking may block optimal personality development and may lead to serious short and long range problems.

Learning opportunities

1. Discuss the basic emotional needs such as love, acceptance, belonging, security, success, intellectual stimulation, independence, sense of worth. Consider some realistic and wholesome ways young teenagers can meet these needs through participation in appropriate activities in the home, church, school and neighborhood.

2. What are some typical frustrations of 7th graders? What are some of the undesirable ways to meet these frustrations? (e.g., showing off, over-aggressiveness, bragging, lying, avoiding others, rebellion) Role-play or discuss a situation of undesirable behavior that is not related to drugs, smoking or drinking, e.g., responding to the frustration of not having any close friends in a new school by avoiding others or ignoring classmates who are trying to be friendly. Ask the class to suggest other means of coping with this frustration, then re-enact the situation incorporating the suggested changes. Conclude this activity by making a class list of ways to build self-confidence and self esteem.

3. Repeat the role-playing or discussion activity described in (2), using a situation related to smoking, drinking or experimenting with drugs, e.g., a boy or girl who is tempted by his friends to smoke or drink because, the friends say, "All the other kids do," or "It'll make you feel good," or "You can't belong to our club unless you do." In the ensuing discussion, suggest that the pupils consider:

- Parental and religious beliefs on smoking and drinking
- Laws about smoking and drinking by minors
- What they already know about the health risks of smoking and drinking (note: this phase of the discussion will give the teacher clues as to the knowledge level of the pupils on these subjects)
- Will conforming to peer pressures rather than conforming to parental expectancies help build self-esteem, self-confidence, or contribute to a parent's desire to trust his children?

Many other relevant discussion questions will come from the class if the teacher will encourage the pupils to express themselves.

4. List the reasons pupils give for teenagers starting to smoke or drink. Discuss the relation of the reasons expressed to meeting the basic emotional needs.

5. Role-play or discuss ways pupils can resist peer pressures to smoke or drink without unnecessarily offending others or being continuously taunted by accusations such as "chicken", "baby", and "poor sport".

6. Have pupils summarize from previous instruction at home, church or school the main reasons young teenagers should avoid smoking and drinking.

Lesson 5

Concepts

1. Advertising is a prime factor in the widespread use of tobacco today.

2. The decision to smoke or not to smoke is an individual decision that should be based on scientific facts rather than the pressures of advertising or peers.

Learning opportunities

1. Show the FS/R, Tobacco: The Habit and the Hazards. Select from the accompanying teacher's guide the most appropriate suggestions for follow-up discussion.

2. Analyze tobacco advertisements as to types of appeal such as social status, achievements of smokers, health, athletic ability. Pupils may be asked to bring to class a variety of tobacco ads, or tape recordings of radio and TV ads, for group study of the accuracy of their appeal.

3. Analyze the anti-smoking appeals that are broadcast by health

agencies. Compare these with the pro-smoking ads as to accuracy and nature of appeal.

4. Construct a display of pro-smoking ads, and questions and scientific answers which negate the validity of the advertised claims.

5. Evaluate the entire unit; suggest revisions and improvements.

Evaluation

1. Develop a role-playing situation in which pupils make decisions concerning experimenting with smoking, drinking and marijuana in terms of what they have learned in this unit.

2. Have students prepare a series of articles for the school newspaper, or prepare bulletin boards on subjects such as:

   "To Smoke or Not to Smoke"

   "Pot's a Put-On"

   "Are We a Drug-Taking Society?"

   "Is Your Home Safe" (proper storage of drugs and hazardous substances)

   "Watch out for 'Con Men'"(older teenagers who tempt younger teenager to smoke, drink, try drugs)

   "How to Say No--and Still have Friends"

   "How Emotionally Mature Are You?"

   "Athletics and Smoking Don't Mix"

3. Write a skit and perform it for your class, other classes, or a parent's meeting on some subject related to this unit.

GRADE 8

SCIENCE

(integrated with the study of the human nervous,
circulatory and respiratory system and genetics)

Objectives

To help pupils

1. understand how certain common and legal drugs modify body functions
2. evaluate the psychological and social values of smoking which are claimed by it proponents with the potential detrimental effects
3. become aware of the synergistic effects of taking more than one drug at a time
4. decide to avoid any experimentation with or use of harmful or illegal substances.

Lesson 1

Concepts

1. Drugs of use and abuse can be placed in several categories.
2. The functions of the nervous system are altered by the action of drugs.

Learning opportunities

1. Give an oral or written pre-test to determine the knowledge level of the pupils.
2. Introduce the film Drugs and the Nervous System (also suggested for showing in grade 6).
3. If the film is not available, introduce the unit by means of transparencies made from Drugs of Abuse, or project the illustrations in this reference with an opague projector, or show set of slides which illustrates the major drugs.
4. Categorize the drugs mentioned in the film by their action on the central nervous system (stimulant, depressant, reality-altering or hallucinogens, other). Identify which drugs are legal and which are illegal, and which are legally and medically classified as narcotics or dangerous drugs.

5. Discuss the drugs studied in terms of their dependency effects, distinguishing between physiological and psychological dependence.

6. Discuss the relation between the effects of psychological dependence on the individual and his present and future goals in life.

7. Discuss the synergistic effects of taking more than one drug at a time. Draw out from the pupils some examples, e.g., drinking an alcoholic beverage shortly after a session with the dentist when a pain killer such as novacaine was taken.

Lesson 2

Concepts

1. Alcohol is the number one drug of abuse.

2. The use of alcohol has predictable effects on the human body.

3. The decision to drink or not to drink is an individual choice. This choice should be an informed choice based upon understanding of a broad range of scientific knowledge about the effects of alcohol, the risks of alcoholism, religious and family beliefs, the attainment of emotional and legal maturity, and personal preferences.

4. Excessive, compulsive and inappropriate drinking adversely affects the individual, his family and society.

Learning opportunities

1. Introduce and show the FS/R, Alcohol: Decisions About Drinking. Select from the accompanying teacher's guide the most appropriate suggestions for follow-up discussion.

2. Discuss why some teenagers start to drink, e.g., influences of peer and older friends, curiosity, example of adults, lack of knowledge of its' effects and risks. It may be well to point out that the legal age restrictions on drinking apply to public possession, sale or consumption, not to tasting or drinking alcoholic beverages at home with the knowledge and consent of parents.

3. Evaluate reasons that people who drink or do not drink give for their decision.

4. Evaluate the food value of alcohol.

5. Assign pupils or committees to report on studies of how alcohol affects the brain with accompanying effects on judgment, perception and other functions of the brain.

6. Discuss point of view of religious, cultural groups, and families about the use or non-use of alcoholic beverages.

7. Review the unique risks of alcohol for teenagers.

8. Discuss the early warning signs of impending alcoholism and relate this to the impairment of the nervous system.

Lesson 3

Concepts

1. Breathing efficiency is decreased by smoking.
2. Smoking also impairs the functioning of the circulatory, digestive, excretory and nervous systems.
3. The only way to avoid the severe risks to health from smoking is not to smoke.

Learning opportunities

The following suggestions are taken from the Journal of School Health, Vol. XXXIX, No. 5a, May, 1969, Page 63:

1. Experiment to find out how lung capacity is measured. Set up an apparatus consisting of a half-gallon bottle filled two-thirds full of water and closed with a two-holed rubber stopper. In the stopper is a short inlet tube into which a person blows, and a long exit tube extending from the bottom of the water in the bottle to a graduate cylinder adjacent to the bottle. As the person blows through the tube, the pressure of his breath forces water out of the bottle into the graduate cylinder. The volume of water displaced each time the person exhales is a measure of the amount of air displaced from his lungs. By use of a long rubber tube connected to the inlet tube, the volume of water displaced when the person is exercising, such as running in place may be measured.

2. Have a committee of volunteers interview coaches from the school staff and from neighboring high schools to find out what the coaches advise their athletes about smoking. Summarize the information and report to the class.

3. Ask for volunteers to contact the local offices of the American Cancer Society, the Heart Association, and the Tuberculosis and Health Association for information about the effects of smoking on health.

4. Invite a resource person from one of these agencies or from the local health department or from the nearest Interagency Council on Smoking and Health to demonstrate and discuss effects of smoking on health.

5. Set up a "smoking machine" and watch the accumulation of tars.

6. Pass the smoke through filter paper and note the tar residue on the paper. Compare the relative amounts of residue from filtertip and regular cigarettes. Are filtertip cigarettes "safe"?

7. Place a small amount of the tar with cotton or a paint brush on the stem of a growing plant, also on the tongue of a frog. How much longer does it take for changes to be observed with the plant?

8. Bubble smoke into a flask containing water in which a gold fish is swimming. What happens?

9. Discuss effects of smoking on the body including influences on the circulatory, respiratory, digestive, excretory, and nervous systems.

10. Invite the school nurse or physician or dentist to discuss pupils' questions about smoking.

11. Culminate the study with a panel discussion on "To Smoke or Not to Smoke".

Lesson 4

Concepts

1. Drugs which alter the individual's preception of reality may impair or destroy the mind and will adversely affect one's total personality.

2. Hallucinogenic drugs may damage chromosomes and thus impair future generations.

Learning opportunities

1. Introduce and show the FS/R, LSD. From the accompanying teacher's guide select the most appropriate suggestions for follow-up discussion.

2. Add examples of other hallucinogenic or reality-altering drugs with which the pupils may be familiar because they are mentioned in the mass media, such as DMT, peyote, psilocybin, mescaline.

3. Marijuana is also classified as a hallucinogen. Refer to lesson 3, grade 7, as a basis for reviewing marijuana with pupils, and compare marijuana with LSD and other hallucinogenic drugs which have been discussed.

Lesson 5

Concepts

1. Using any drug for recreational, social or thrill-seeking motivations is misuse of drugs and abuse of the human body and mind.

2. It takes several years of expert research before any drug can be declared to be reasonably safe even if it is used under strict medical supervision.

3. A person who respects his body and mind will use drugs only with the approval of his medical adviser and will follow directions for taking drugs carefully.

Learning opportunities

1. Construct with the pupils on the chalkboard a summary chart of the drugs studied in this unit and the major effects of each on the following systems of the body; nervous, circulatory and respiratory systems. Indicate for each of these drugs the extent and quality of valid research that has already been done to determine their relative safety if used under medical supervision. Assist pupils in the preparation of a list of "safe" drugs and "unsafe" drugs, and indicate which drugs are illegal and why. Classify further under the headings, over-the-counter, and prescription drugs. Have pupils construct a class list of rules for using prescribed and unprescribed drugs safely.

2. Have committees prepare a list of recreational and social opportunities in the school and neighborhood for teenagers. Discuss the point that participating in school and neighborhood recreational and social programs is the wise alternative to using drugs and potentially harmful substances.

Evaluation

1. Ask each pupil to take home to his parents the list of rules for using prescribed and unprescribed drugs safely for their evaluation and suggestions. Revise list if necessary. The revised list may be the central theme of a poster or mural for the halls, for a transparency for other classes to use, or for a program for an assembly or parent's meeting.

2. Form a volunteer "Speaker's Bureau", composed of teams of two to four pupils who, as a team, could prepare and present a program on drugs to a 5th or 6th grade class in a nearby elementary school.

GRADE 9

Social Studies

Objectives

To help the pupil

1. evaluate the nature and extent of cultural patterns of self-medication
2. understand the nature, extent, and seriousness of narcotic dependency
3. become acquainted with the laws which control the use and sale of alcohol, tabacco, drugs and other dangerous substances
4. understand the necessity for personal and social responsibility for preventing and resolving drug-related health and social problems.
5. become aware of the relation between drug abuse and personal, family and social problems.

Lesson 1 and 2

Concepts

1. Narcotic dependency is one of the most serious and destructive drug problems.
2. Most of our supply of illegal drugs is smuggled into the United States from other countries.
3. Opium derivatives have legitimate medical uses.
4. Opiate dependency severely damages mental and physical health.

Learning opportunities

1. Introduce and show the FS/R, Narcotics: Uses and Abuses. Select from the accompanying teacher's guide the most appropriate suggestions for follow-up discussion.
2. Help pupils report on drug use and abuse in the countries they are studying. Some topics for study and discussion are:
    a. The cultural role of opium in historical China.
    b. The economic role of opium in historical China.
    c. The historical evidence that indicates that Oriental warlords introduced opium into the areas they were trying to conquer in order to weaken their military enemies.
    d. Mexico as a chief source of our supply of illegal narcotics.

    e. The use of hashish, a derivative of the same plant from which marijuana is procured, in the past and present history of the countries of the Middle East.
    f. The alcoholism and other drug-related problems in the Soviet Union.
    g. Tribal rites at puberty in many of the African countries which involve a "demonstration of manhood."
    h. The evidence that Red China is a chief supplier of drugs of abuse.

3. Committee or individual reports on narcotic dependency:

    a. Physiologic and psychologic effects of heroin dependency.
    b. Legitimate medical uses of certain opiates.
    c. Synthetic narcotic drugs, legal and illegal.
    d. Cocaine, a stimulant drug classified legally as a narcotic.
    e. The profit motive in the illegal drug traffic.
    f. Similarities and differences between dependency on "hard" narcotics and "soft" drugs of abuse.
    g. The effects of heroin dependency on the addict's goals in life.
    h. The history of the legal and illegal use of opium derivaties in this country.

1. UN, UNESCO, and WHO efforts to control illegal drug traffic on the international levels.

Lesson 3

Concepts

1. Treatment and rehabilitation of persons who become dependent upon drugs are difficult and uncertain.

2. The major focus in the prevention and treatment of drug dependency is psychological rather than physiological.

3. There is a community need for more facilities, particularly those which may help prevent a youthful "experimenter" from becoming a drug dependent.

Learning opportunities

1. Review frames 28-34, 43-51, and 52-55 for the FS/R, Narcotics: Uses and Abuses.

2. Have committees or individuals report on:

    a. The federal hospitals at Lexington, Kentucky and Fort Worth, Texas, which treat drug addicts.
    b. The California State Hospitals for drug addicts at Cornona, Napa, and Mendocino.

c. State and local public supported treatment facilities for alcoholics and other drug dependents.
d. Local privately supported treatment facilities for adults with drug-related problems.
e. Drop-in centers for teenagers with drug-related problems.
f. AA, Alanon, Alateens.

3. Committee or class visit to agencies such as Teen Challenge, Syndnon, Off Ramp, IMPAC and others, with follow-up discussion and evaluation.

4. Invite a resource person from one of the local treatment centers, or a psychologist, psychiatrist or social worker,to talk with the class about the relationship between emotional instability and drug dependency.

5. Invite the school nurse to talk with the class about the community mental health services available to teenagers.

6. Discuss: What facilities does our community need to help a youthful "experimenter", "turn off", and "drop back"? What social action should be taken to establish and maintain these facilities?

Lesson 4

Concepts

1. The drug abuse problem is closely related to social problems such as crime, accidents, family disorganization, suicide.

2. The drug abuse problem is closely related to economics.

3. The teenager has a personal responsiblity to help solve the social problems related to drug abuse.

Learning opportunities

1. Review frames 35-42, in the FS/R, Narcotics: Uses and Abuses.

2. Discuss the relationship between the social problems listed in the first concept of this lesson and drug abuse. Some specific topics for individual reports or panel discussion might be:

   a. Current local arrest reports for alcohol and drug abuse among minors.
   b. The drinking driver and traffic accidents.
   c. The problem of bad checks related to alcohol sales.
   d. Suicide caused by drug misuse.
   e. Prostitution and robbery by opiate dependents.
   f. Alcoholism as related to family disorganization.
   g. Social health problems related to drug abuse, e.g., hepatitis among "mainliners", venereal diseases and illegitimacy and alcohol and drug abuse.

3. Discuss the economic aspects of drug abuse, e.g.,

    a. Intoxication and alcoholism: absenteeism from work, economic losses to the community, industrial accidents.
    b. Hard drug dependency: cost of treatment and rehabilitation, economic losses of non-productive patients.
    c. Cost of a pack-a-day cigarette habit.

4. Discuss the teenager's responsibilities toward solving the drug abuse problem, e.g.,

    a. Learning the truth about drugs.
    b. Using necessary drugs carefully.
    c. Avoiding unnecessary drug use, especially for minor and short-term ailments.
    d. Resisting temptations to experiment with alcoholic beverages, smoking or drugs.
    e. Helping others know the dangers.
    f. Reporting evidence or suspected drug abuse to parents or other responsible adults.
    g. Knowing and obeying the laws which protect people from drug abuse.
    h. Diminishing the likelihood of becoming a drug dependent by developing interests and behavior patterns which foster emotional maturity.
    i. Recognizing the early signs of personal inadequacy to deal with everyday problems and seeking professional help.

Lesson 5

Concepts

1. Laws regulating the sale and use of drugs represent a group consensus of what is best for society, and should be obeyed and respected.

2. Drug law enforcement agencies need the cooperation of indiviuals in order to carry out their responsibilities.

3. Minors who violate drug laws jeopardize their present freedom and incur potential risks which may affect their later life.

Learning opportunities

1. Consult the area of the 8th grade course of study in social studies on civics, and review with the class the laws pertaining to drugs.

2. Differentiate between the law enforcement responsibilities of the Food and Drug Administration and the Bureau of Narcotics and Dangerous Drugs, on the federal and state levels.

3. Individual or committee reports derived from reading, visits, resource persons invited to class on subjects such as:

    a. Pending and/or recently enacted laws on drugs of abuse.
    b. Pending and/or recently enacted laws concerning alcohol content of the blood as prima facie evidence of driving under the influence.
    c. Drug laws which pertain to minors only.
    d. The use of informers by law enforcement agencies.
    e. The disposition of contraband drugs confiscated by authorities.
    f. Delineation of responsiblities and cooperation among federal, state and local authorities.
    g. How over-the-counter drugs are controlled by FDA.
    h. The legal process by which a drug is removed from the market by FDA.
    i. Narcotic reports and records which doctors and pharmacists are required to keep.
    j. Legal responsibilities of the school relevant to alcohol, tobacco, drug abuse.

4. Duplicate or project the summary of "Penalties for Drug Abuse" and review with the pupils, noting particularly the areas most relevant to minors.

5. Invite a probation officer, judge, or lawyer to talk with the class on the usual procedures which follow the arrest of a minor for a drug violation. The legal rights of a minor as well as the potential or actual punishment should be included. Also important is how a minor's arrest record may be sealed if he is "clean" for several years.

6. Discuss the potential restrictions in adult life that may accrue as the result of a junvenile arrest record.

7. Have a committee investigate and report on sources of legal aid for a minor and his family who are unable to afford a private lawyer.

8. Review the processes by which a law may be changed or a new law enacted, as they may pertain to drug laws. Consult 8th grade course of study, area on civics.

9. A concluding activity might be a panel discussion on the individual's responsibility for respecting and complying with the drug laws, particularly those which relate to the use of marijuana by anyone and the use of alcohol and tobacco by minors.

Evaluation

1. Panel or symposium: "If I Were 21 -- legal and social controls I would vote for to help solve the drug abuse problem." Among the areas which might be included are: Changes in existing laws, new laws, enabling laws for treatment centers, mental health community services for prevention, international controls of the illegal drug traffic.

2. Have interested pupils plan and implement a student Drug Information Center, under parent-teacher supervision. Involve 7th and 8th graders as well as 9th graders. Among the activities may be:

   a. List from lending library of suitable reading materials on drugs, including related fiction books as well as references. The librarian may be asked to assist with the selction of reading materials appropriate for young teenagers.
   b. Speaker's Bureau: teams of pupils who can serve as resource persons to classes of younger pupils, particularly in nearby elementary schools.
   c. Field trips to community agencies which aid drug users.
   d. Series of noon programs for voluntary attendance by interested pupils, to which some of the following resource persons may be invited: former drug users, lawyer, police, physician, representatives from community agencies, and/or discussion groups on various aspects of the drug problem.

3. Panel discussions on topics such as:

   a. Contemporary international aspects of the drug abuse problem.
   b. Are we a drug-oriented society?
   c. What can a teenager do to help solve the drug problem in the community?
   d. Which drug laws need changing?
   e. What new drug legislation do we need?
   f. True and false approaches to discovering the meaning of life.
   g. Comparison of the economic costs of treatment and rehabilitation and the prevention of drug dependency.
   h. Patterns of drug use in underdeveloped countries.

4. Prepare a program on the theme, "What Can Our School Do About The Drug Problem," for presentation to other classes, or to a parents or faculty meeting.

VOCABULARY ... Simple definitions for pupils

1. **Drug.** Chemicals which may affect body structure or function, or alter behavior and which if used legitmately and wisely, may prevent, treat or cure illness.

2. **Drug misuse or abuse.** Mistreatment if the body or mind by the improper or excessive use of drugs.

3. **Dependence.** A compulsion to take drugs.

4. **Tolerance.** A tendency to need increased dosage to obtain the desires of desirable effect.

5. **Depressant.** A substance which speeds up the normal activities of the body or mind, "down" drugs, or "downers".

6. **Stimulant.** A substance which speeds up the normal activities of the body or mind, "up" drugs, or "uppers".

7. **Tranquilizer.** A substance which has a calming effect on the mind.

8. **Hallucinogen.** A substance which may cause a person to experience unreal sight, sounds of feelings; e.g., LSD.

9. **Narcotic.** Medically, a substance which induces sleep or masks pain; legally, a classification of certain of the most hazardous drugs; e.g., morphine, heroin.

10. **Amphetamines.** A chemical family of stimulant drugs which mask fatique, or depress appetite; e.g., pep pills, reducing pills, "speed".

11. **Barbiturates.** A chemical family of depressant drugs which induce relaxation and sleep, e.g., sleeping pills.

12. **Inhalant.** A substance which, if inhaled in large amount, may cause intoxication or unconsciousness; e.g., certain glues.

13. **Over-the-counter drug.** A drug which may be purchased without a prescription; commonly called OTC drugs; e.g., aspirin.

14. **Prescription drug.** A drug which may be purchased only if prescribed by a physician.

INFORMATION ABOUT ALCOHOL

GENERAL INFORMATION

1. The chief alcoholic beverage consumed in this country is beer, followed by the distilled liquors, with the wines a distant third. Americans spend about one out of every eight food dollars for alcoholic beverages.

2. About two-thirds of the people in the United States over 15 years of age drink to some extent. In San Francisco, it is estimated that 9 out of 10 people over 16 drink at least occasionally.

3. Many nationwide surveys show that about 67% of the high school students sampled have had some experience drinking as did almost half (48%) of the grade school students. Local authorities believe that in San Francisco the percentage is higher than the national norms.

4. Most students have already made the decision whether or not to drink by the time they graduate from high school.

5. Regional, subcultural and ethnic drinking patterns are clearly reflected in the drinking habits of adults.

6. The family is a dominant force in determining future drinking patterns of their children.

UNIQUE RISKS OF TEEN-AGE DRINKING

1. Since they are generally smaller and consequently weigh less, adolescents are affected more quickly and more severely by alcohol than adults.

2. The intense emotional response to situations characteristic of adolescents predisposes this group to be more susceptible to psychological intoxication to the extent that even one drink may result in erratic behavior.

3. The use of alcohol by adolescents as a means of coping with conflicts prevents the development of skills needed to solve the many problems of daily life.

4. The body tends to reject foreign substances on initial contact with the result that adolescents are more likely to become ill after drinking than are adults who have been accustomed to alcohol.

5. Recently learned skills are adversely affected by even small amounts of alcohol so that the combination of inexperienced drivers and inexperienced drinkers constitute a potentially dangerous situation.

6. The use of alcohol may reduce the desire for foods of adequate dietary value, at a time when rapid growth necessitates the maintenance of good nutritional practices.

NATURE OF ALCOHOLIC BEVERAGES

1. Ethyl alcohol is the principal intoxicating agent of most alcoholic beverages.

INFORMATION ABOUT ALCOHOL

2. The non-distilled alcoholic beverages such as wine, beer, ale, port, and stout are created through a process called fermentation.

3. Fermentation will not produce alcoholic beverages over 15%. In order to produce beverages with alcoholic content over 15%, a process called distillation must be employed or more alcohol must be added as is the case in making fortified wines such as port or sherry.

4. Distilled beverages such as whiskey, brandy, rum end vodka are made by collecting the steam which is a product of boiling a starchy substance.

5. Although alcohol may be classified as a food, it is a poor food from a nutritional standpoint because it lacks vitamins and minerals. Alcohol does release heat and energy. It liberates more calories than carbohydrates and less than fats.

METABOLISM OF ALCOHOL

1. Absorption is the process whereby food from the stomach progresses to the bloodstream. The rate of absorption may be affected by food in the stomach, speed of drinking, choice of beverage, and many other variable factors such as the condition of the liver, the presence of drugs, malnutriton, and whether or not alcohol is taken with food.

2. Oxidation is the process by which the dissolved alcohol in the blood is mixed with oxygen resulting in the release of heat and energy. During this process the alcohol undergoes changes in the liver before it is converted to heat and energy. Each individual burns alcohol at his own unique rate. This rate is in part affected by body size Large individuals can usually consume more alcohol than smaller persons without undue effects because they have more fluids in their bodies in which the alcohol is diluted.

SOME EFFECTS OF ALCOHOL

1. Alcohol is not a stimulant but rather a depressant and even small concentrations affect the higher brain centers. The intoxicating action of alcohol affects the brain causing impairment of its normal functioning which in turn results in abnormal activities of the organs controlled by the brain. In small doses it has a sedative effect, in larger doses an analgesic or pain killing effect, and in even larger doses a hypnotic effect. If the dose is great enough, death may result through the paralysis of the brain centers which control breathing and heart action.

2. The exact action of alcohol on the brain remains obscure.

3. Alcohol affects the function of various parts of the body, not the structure. Organic changes may accompany chronic alcoholism because of long standing nutritional deficiencies.

4. Personality traits such as aggression, timidity, superiority or inadequacy and other expressions of feelings not normally observed

in specific individuals except when drinking, are not created by the action of alcohol but simply released as formerly suppressed characteristics of the individual's existent personality. This condition arises because of the depressant effect of alcohol on the parts of the brain which normally control inhibitions.

5. Even small amounts of alcohol may reduce one's ability to concentrate.

6. Deterioration of judgment and self-control with accompanying impairment of hearing, sight and touch is evident before any muscular decline.

7. Research studies substantiate the fact that alcohol creates a sense of well being which leads to over-confidence, inflated ego and a willingness to take a chance.

8. The detrimental effects of alcohol on manual or motor skill increases in proportion to the:
   a. complexity of the skill: the more complicated skills are adversely affected first.
   b. familiarity of the skill: newest learning is adversely affected first.
   c. drinking experience of the individual.
   d. individual capacity for self-control.

9. Alcohol increases the length of reaction time.

10. The risk of intoxication is neither enhanced nor diminished by combining different alcoholic beverages, but the likelihood of developing nausea is increased.

11. In small amounts, alcohol may increase appetite and aid digestion due to an increase in the digestive enzymes, but large amounts may result in over-acidity and discomfort.

12. The warmth attributed to alcohol occurs because of the dilation of capillaries near the surface of the skin. This is a false sensation, however, since the body temperature actually falls after this short lived reaction.

13. The lowered inhibitions and decreased anxiety level which follow drinking may increase the desire for sexual activity. Excessive drinking, however, decidedly impairs the ability to consummate such an act.

14. Assuming that conditions which affect absorption are equal, large individuals can drink more than smaller individuals before showing adverse effects since they have more fluid in the body by which to dilute the alcohol, thereby lowering its concentration. Psychological factors also significantly influence the onset of adverse behavior patterns which result.

15. Casual observations of drinking behavior point out the fact that the same amount of alcohol affects people differently. In many instances the phenomenon cannot be explained by differences in body size. In these cases the answer is most likely provided by psychological factors which are of significant

influence. The three most powerful psychological influences involve the individual's susceptibility to suggestion, his mood, and his expectations at the time of drinking. As a result, "nervousness" may be increased or decreased by alcohol.

16. Nausea or vomiting after drinking may be explained by a peculiarity called pylorospasm. This is the abnormal functioning of the valve leading from the stomach to the small intestines, causing a reverse in the normal peristalsis, or muscular contractions which move the food from the stomach to the small intestines.

17. The sedative effect of alcohol and the complicated nature of driving are incompatible. The greatest of all human traffic hazards is is an inexperienced driver who is ordinarily easily upset and who takes an unaccustomed drink or two before venturing out on the highway. Almost all teen-agers and some adults fall into this category. At least 50% of serious accidents are associated with drinking.

PROBLEM DRINKING

1. Problem drinking may be defined as the misuse of alcohol under any or all of the following conditions:
   a. on inappropriate occasions
   b. in excessive amounts
   c. with resultant behavior detrimental to the individual and his associates

2. Well over 90% of those who use alcoholic beverages do so in limited amounts on appropriate occasions and with no adverse effects.

3. Research studies indicate that one in 14 to 17 drinkers become problem drinkers, and of this group of problem drinkers one in about 17 becomes an alcoholic.

4. Problem drinking and successful family membership often are incompatible.

5. Criminologists generally agree that excessive drinking rarely is the prime cause of criminal behavior although many prison inmates have drinking problems.

ALCOHOLISM

1. Drinkers who become alcoholics can be described as those individuals who have lost control of their drinking habits to the extent that they are intoxicated frequently or for several hours or days at a time, drink at inappropriate times, gulp drinks, lost interest in activities other than drinking, endanger their health through preoccupation with drinking, and those who drink not by choice, but by compulsion.

2. Alcoholism is a major public health problem that affects 4 to 5 million people in the United States, or approximately 4% of the adult population. The proportion of alcoholics has not increased over the past decade.

INFORMATION ABOUT ALCOHOL

3. Alcoholism is the fourth biggest public health problem, superceded only by heart disease, cancer and accidents.

4. Alcoholism, by the definition officially adapted by the World Health Organization and the American Medical Association, is a disease. An alcoholic, therefore, is a sick person, not a criminal nor moral reprobate.

5. The rate of alcoholism in San Francisco is the highest in the nation for a city of comparable size.

6. Cirrhosis of the liver, often but not always associated with excessive drinking over a long period of time, is the 4th leading cause of death in San Francisco; in California it is 6th; in the United States, 9th. (1967 statistics, San Francisco Department of Public Health.)

7. The causes of alcoholism are still unknown. It is a complex illness which undoubtedly has biological, psychological, and sociological components.

8. Most alcoholics are not on Skid Row. Almost all of them live in typical residential districts and are employed.

9. Alcoholics are susceptible to nutritional deficiency diseases. Eight ounces of distilled liquor provides a 150 pound man with two-thirds of his caloric requirement for one day. Typically, the heavy drinker is disinterested in food because his caloric needs, though not his nutritional needs, have been fairly well met by alcohol.

HANG-OVERS

1. The discomfort which follows excessive drinking results from a disturbance in the equilibrium of fluids in and around the cells.

2. Time, sleep, and rest are the only cures for this condition.

3. Popular folklore that exercise, fresh air, cold showers, black coffee and such will hasten recovery from excessive drinking has no scientific foundation. A temporary exhilaration may result from such "treatment" but the level of intoxication remains the same.

INFORMATION RELEVANT TO PREVENTING INTOXICATION

1. The only sure preventative is abstinence.

2. Drink sparingly, slowly, and choose well-diluted drinks instead of more concentrated ones.

3. Eat before and during drinking. Foods eaten with drinks "insulate" against the rapid effects of alcohol. Proteins are more effective for this purpose than fats or starches.

4. Carbonated dilutants, such as soda water, speed the action of alcohol; water used as a mix slows down alcohol's action.

5. The effects of alcohol are felt more quickly at high altitudes than at sea level.

INFORMATION ABOUT ALCOHOL

6. Small individuals who do sedentary work will feel the effects of the same amount of alcohol more quickly than large individuals who do hard physical labor.

7. If you must drive after drinking, wait at least one hour after the last drink before taking the wheel. This time lapse permits the body's oxidation mechanism to catch up and thus utilize the alcohol.

8. Taking drugs or medicine of any kind with an alcoholic beverage is extremely risky because of the synergistic effects of many drugs. For example, a highball plus a sedative may not be just twice as potent as either alone; it may be at least four times as potent.

SUGGESTIONS FOR TEACHING ABOUT ALCOHOL

1. Since today's youth will probably follow the example of their elders, most of them will drink to some extent at some time in their lives. Along with pointing out the legal aspects and mental health advantages of abstinence during adolescence, teach enough about alcohol's varied effects so students will understand how to minimize the risks of intoxication when and if they or their associates ever drink.

2. Distinguish clearly between drinking, drunkenness, and alcoholism. The first is a social custom acceptable to most adults or appropriate occasions. The second is rarely socially acceptable and is always risky. The latter is a disease or disorder.

3. Since young people are more interested in the prsent than the future, concentrate on the subject of "drinking" rather than alcoholism. Older teen-agers will be more interested in alcoholism as a social problem than as a threat to themselves in later life.

4. Be sure students know where to get help for alcohol-related problems. Among the resources are medical and religious advisers, Alcoholics Anonymous (for adults with alcohol-related problems), Alanon (for family members of all ages who have a loved-one with an alcohol problem), and Alateen (for teen-agers with an alcohol problem).

5. Emphasize that the most immediate effects of alcohol are impaired judgment and diminished inhibitions. Tie this in with discussion of dating behavior.

6. Help the student realize that drinking never solves any problem and frequently creates new and more serious problems.

7. Impress the students with the fact that an alcoholic is a person who is ill and in need of treatment and understanding rather than censure.

Reference:
F. Todd, Teaching About Alcohol

INFORMATION ABOUT DRUG USE AND MISUSE

THE DRUG MISUSE PROBLEM

Arrests of California juveniles for drug offenses increased 24% over the five year period 1961-1966. In San Francisco, juvenile arrests increased from 9 in 1965 to an overwhelming 167 in 1966, representing an increase of well over 1500%. The average age of the offenders is 16 years. Law enforcement agencies believe that arrest statistics represent only an extremely small percentage of the actual incidence of illegal juvenile drug usage.

TERMINOLOGY

1. **Drug:** any non-food substance, medicinal or non-medicinal, which may be potentially harmful to the individual or society.

2. **Drug misuse:** self-administration of any drug to the extent that the individual or society may be harmed.

3. **Dependence:** according to the World Health Organization, dependence means "a state arising from repeated administration of a drug on a periodic or continual basis". The terms "addiction" and "habituation" are no longer used by most authorities. The use of the more general term, "dependence", requires delineating the exact drug which one is discussing, e.g., drug dependence of the opiate type.

4. **Tolerance:** a physiological condition whereby the drug user is forced to increase steadily the dosages of the drug to realize the desired effects.

OPIATES

1. **Medicial use:** relief of pain.

2. **Examples:** morphine, codeine and other opium derivatives, heroin (produced synthetically from morphine), percodan.

3. **Usual method of use:** intravenous injection.

4. **Effects:** drowsiness, sleep; **side effects:** nausea, vomiting, constipation, itching, constriction of pupils, slow breathing.

5. **Heroin.**

   a. Produces "high" or "kick" of almost orgasmic nature, followed by "nod" or state of euphoria or oblivion.
   b. Withdrawal symptoms severe.
   c. Diminishes sexual desire and activity.
   d. Tolerance develops quickly.
   e. Damage to tissues is rare.
   f. Rarely used by school-age youth.

6. **Opiates in cough syrup**

   a. Use by youth believed fairly common, but difficult to assess extent accurately.
   b. Many cough syrups containing opiates also contain an emetic which tends to reduce change of dependency.

INFORMATION ABOUT DRUG USE AND MISUSE

DEPRESSANTS: Barbiturates and Tranquilizers

1. Barbiturates: (commonest drug which produces dependence)
    a. Medical uses: sedative, sleep producer, control of disorders such as epilepsy, high blood pressure, gastrointestinal illnesses.
    b. Examples: drugs under trade names of seconal, amytal, nembutal.
    c. Safety: usually safe if used exactly as prescribed.
    d. Usual form: pills, capsules.
    e. Symptoms of abuse: intoxication similar to that of alcohol; slurred speech, staggering gait, sluggish reactions, erratic behavior, laughs or cries easily.
    f. Withdrawal from a dependent individual can cause convulsions which can be fatal if untreated.
    g. Using barbiturates and alcohol at the same time can be extremely dangerous because of the synergistic effects of the drugs.
    h. Death rate from accidental or intentional excessive use is very high.
    i. Physiological and psychological dependence may result from excessive use.

2. Tranquilizers
    a. Medical use: relief of minor mental or emotional disorder.
    b. Psychological and physiological dependence may result from excessive use.
    c. Withdrawal from dependent individual can cause convulsions which can be fatal if untreated.

STIMULANTS: Cocaine and Amphetamines

1. Cocaine
    a. Derived from leaves of coca tree.
    b. No longer used medically except as local anaesthetic.
    c. Widely used in parts of Latin-American, where dependence is common.
    d. Effects: reduction of fatigue, talkativeness, euphoria, increased muscular strength, hallucinations, followed by depression.

2. Amphetamines
    a. Medical use: treatment of obesity, depression, hypoactivity, behavioral disorders in children, excessive sleepiness.
    b. Examples: trade names such as dexedrine, methedrine or metamphetamine ("crystal" or "speed"), benzedrine.
    c. Effects: produces feeling of well-being, counteracts depression, inhibits appetite, masks fatigue, increases alertness.
    d. Effects of misuse: psychological but not physiological dependence, increased tolerance requiring dosage many times that used medically; restlessness, talkativeness, excitability, insomnia, profuse perspiration, increased urinary frequency, tremor; if used intravenously, psychotic behavior may result.

e. Frequently misused by students to stay awake to study for final examinations, and by drivers on long motor trips.

HALLUCINOGENS

1. Medical use: experimental medical use of LSD in the treatment of alcoholism and certain psycho-sexual disorders has been reported as potentially successful; other hallucinogens have no medical use.

2. Examples: LSD, DMT, peyote, psilocybin, mescaline, marihuana.

3. Effects: distorted sensory perceptions, psychological dependence; no physical dependence is believed to be produced, no physical symptoms occur on withdrawal.

4. LSD

   a. Effects: visual, auditory and tactile hallucinations, changes in perception, thought, mood, activity, time sense, comprehension; some "trips" are characterized by panic, disorientation, severe depression.
   b. Lasting effects: in some users, may include psychotic behavior, even in persons who previously exhibited no signs of emotional instability.
   c. Recurrence of psychotic effects may occur weeks or months after dosage.
   d. Epileptic seizures may be triggered.
   e. There is some evidence that genetic damage may occur and adversely affect progeny.
   f. Claims by proponents of improved functional efficiency and expanded consciousness have not been proven by objective investigation; on the contrary, impaired functioning results.

   g. Many suicides and other acts of violence have occurred while individuals were under the influence of LSD.
   h. Patterns of LSD usage: many adolescents are particularly interested in LSD since this is the age group in which the search for identity, exploration, attempt to achieve adult status through rebellion against society, and the seeking of solutions to personal conflicts, plays such a significant role. They believe LSD may provide the solution to one or more of these problems. Newspapers, television, radio, and even prominent persons have glorified LSD to the extent that pushers merely have to supply the drug to customers rather than persuade or induce them to indulge in its use. Dr. Sidney Cohen classified the LSD user as follows:

      (1) The Explorer: curious to experience sensory awareness characteristic of the drug.
      (2) The Social LSD Takers: provides a common bond for sense of belonging.
      (3) Hedonistic Group: takes the drug for kicks. Among this group are those who are dissatisfied with reality. LSD is used as a means of withdrawal and continuous escapism.
      (4) Magic Pill Group: hope LSD will cure them of what they really are:

emotionally immature individuals who are probably pre-psychotic.

(5) Artistic Group: attempt to see things differently through altered perception; common throughout history.

(6) Religious Seekers: believe LSD provides answers to questions about the universe and solutions to one's personal problems.

(7) Accidental Takers: this group usually consists of children but also includes some adults who have been given the drug without their knowledge.

5. Mescaline, psilocybin, peyote, DMT produce effects similar to LSD, but the effects are usually less intense and are of shorter duration.

6. MARIHUANA

a. Medical use: none.
b. Usual method of use: smoked or eaten.
c. Effects: psychological dependence, particularly in susceptible individuals, distortion of sense of time and distance; euphoria; feeling of exaltation; dreaming; and sometimes hallucinations; panic or fear may result; user may be very talkative, or very quiet and drowsy; effects are unreliable and unpredicitable.
d. Physical dependence, abstinence syndrome, physical damage do not develop.
e. In San Francisco, 59% of the juvenile drug arrests involved marihuana users. (1966)
f. Harm to society is derived from economic consequences of the impairment of the individual's social functions and his enhanced proneness to asocial and antisocial behavior.

SOLVENTS

1. Examples: glue, gasoline, paint thinners, lighter fluid, coolants and other volatile chemicals.

2. Effects: state of excitation and exhilaration similar to alcoholic intoxication, often characterized by blurred vision, slurred speech, loss of balance, black-outs; prolonged use may result in anemia, mental deterioration, liver damage, and death.
3. Users sometimes use plastic bags to hold the glue or solvent up to their face, thus risking suffocation.

4. Misuse is usually limited to individuals in late childhood or early adolescence, and is most frequent among children with a history of delinquent behavior.

SOCIAL ASPECTS OF DRUG MISUSE

1. Society should accept the existence of and differentiate between the occasional or spree drug user and the chronic abuser to whom drug abuse is a way of life.

2. The chronic abuser is a sick individual and should be treated as such.

INFORMATION ABOUT DRUG USE AND MISUSE

3. Drug misuse is a sympton of a deep, underlying disorder; it may range from teen-age rebillion to sever disorders, and is often characterized by loneliness and alienation.

4. Legal restriction on drugs has been part of society since the dawn of history and is a social necessity.

5. The family is the prime influence on the prevention of drug misuse by the young. Parental love, care, and guidance particularly during the years of late childhood and adolescence, insulate the child against loneliness and alienation, and usually young people thus influenced have no need to escape by means of drug misuse.

TIPS FOR TEACHING ABOUT DRUG USE AND MISUSE

1. Aim for an honest balance between the conservatively alarmist and the defiantly radical. Differentiate between facts, beliefs, and opinions.

2. Narrow the communication gap between the generations:
   a. Be familiar with the sources from which teen-agers get their information as well as the sources teachers consider prestigious.
   b. Know the jargon of teen-agers and the drug-using subculture.
   c. Let pupils air their views freely in an atmosphere of mutual curiosity and a sharing of opinion and experience.
   d. Listen and look for differences between pupils' words and actions and their underlying needs and motives.
   e. Be constantly aware that social attitudes which create undue stress situations may do more lasting harm than a one or two time use of most drugs.

3. Guide pupils to differentiate between:
   a. Physiological effects of drugs and the influence of drugs on psychological effectiveness.
   b. Honest scientific research and pseudo-research.
   c. Medical views and moral views.
   d. The often divergent viewpoints of health scientists, criminologists, and human rights proponents.
   e. Risks inherent in the use of any drug, and the risks of known or suspected dangerous drugs.
   f. Risks and benefits of the use of dangerous drugs, short term and long term, physiological, psychological, and social.

4. Explore with pupils some of the reasons teen-agers take dangerous drugs.

5. Minimize teacher-imparted information. Substitute dialogue-centered instruction. Center activities around situations and concerns that are real or realistic to the pupils.

6. Pre-test: you may be amazed at how well-informed your pupils are on a subject of deep interest to them.

7. Use examples from current mass media. Help students evaluate reporting, detect bias, identify honest onctroversy, differentiate

between sensationalism and scientific findings.

8. Consider: Have we overstressed happiness and fun in our society? To what degree is stress related to human productivity and personal and social well-being? How does this relate to the drug subculture?

9. Explore with pupils: If a person who tuned in, turned on, and dropped out wants to tune out, turn off, and drop back, how can he be helped?

10. Know some of the reasons why marihuana is more risky than alcohol; (illegal, effects less predictable and reliable, users isolate themselves from mainstream social activities of the majority of people).

11. Gear your teaching to a realistic target group. You'll not convert the extremists. You'll probably reinforce the beliefs of many of your pupils. Your instruction is most likely to influence those who are not' too strongly committed and who are still open minded.

12. Be honest. If you don't know the answer to a question, admit it. If there are controversial answers, give all sides of the story. If pupils ask your opinion or beliefs, state them.

Don't scold, threaten or exhort. Remember: few teachers but most teen-agers are under peer pressure to experiment with drugs.

13. Our young people believe in physical, material, intellectual, psychological, and spiritual fulfillment. Explore with them how drug misuse may damage or prevent their achieving self-fulfillment. Help them see that if they get "hung-up" on drugs they will have "copped-out" on themselves.

14. Finally, be aware that during the teen years acceptability as a worthwhile person is harder to come by than at any other time of life. Younger children, and adults of all age groups, do not readily accept teen-agers and their behavior. Acceptance by teen-agers of members of their own age group is even a greater problem.

References:
California State Department of Education, Drug Abuse, A Source Book and Guide for Teacher, 1967
AAHPER-NEA, Drug Abuse, Escape to Nowhere, 1967

INFORMATION ABOUT SMOKING

PREVALENCE

1. A survey conducted by the Advisory Committee to the Surgeon General indicates that less than 5% of the boys and 1% of the girls smoke regularly before the age of 12. By the 12th grade, however, 40 to 55% have been found to be smokers.

2. Estimates of smoking incidence by age 25 are believed to be approximately 60% in men and 36% in women. Smoking prevalence continues to increase until age 35 or 40, after which a decline occurs, until at age 65, 20% of the men and 4% of the women are smokers.

PATTERNS OF SMOKING BEHAVIOR

1. Most authorities and studies agree that the teen years are crucial in determining smoking behavior in that the majority will decide whether or not to develop the practice during this period.

2. Smoking behavior is often strongly influenced by the permissive or prohibitive attitudes of family and friends.

3. There does not appear to be any definite "smoker personality". Certain personality traits are more likely to be observed in smokers; such as extroversion, neuroticism and a more than usual amount of psychosomatic problems.

4. Stressful or challenging experiences are believed to be factors influencing the beginning smoker as well as in reinforcing the habit and the number of cigarettes consumed.

5. The habitual use of tobacco is associated primarily with psycho-social drives which are strengthened by the drug effects on the central nervous system.

6. There is ample evidence to support the fact that the smoking habit becomes compulsive in some heavy smokers. This dependency is psychological in nature. There are no physical withdrawal symptoms which characterize physical dependence upon abstinence from smoking.

7. The motivation for using tobacco must be considerable since it is well known that among beginning smokers certain toxic or poisonous effects such as nausea and vomiting often accompany the initial usage of tobacco.

8. Statistics prove that giving up the smoking habit is extremely difficult for many individuals. Of the methods employed to cure the habit, those which deal with the psychogenic drives have been more successful.

9. It has been suggested that the most effective way to cut down on the number of smokers among young people would be to eliminate the habit among the parents, since it has been demonstrated in some studies that there is a strong correlation between parents' smoking behavior and that of their children. The similarity in children and parent habits constitutes,

according to some authorities, evidence that beginning smoking is initiated by an imitation of and wish for, adult status.

SMOKING AND MORTALITY

1. Observations of thousands of patients and autopsy studies show that many kinds of damage to body function, organs, cells, and tissue occur more frequently and severely in smokers than in non-smokers.

2. The mortality rate for male cigarette smokers is 70% higher than for non-smokers. In general, the greater the number of cigarettes smoked daily the higher the death rate.

3. The mortality rate for smokers who inhale is greater than for smokers who do not. The mortality rate of cigarette smokers appears to be considerably higher than for pipe and cigar smokers. Smokers in the latter two categories, however, have a relatively high mortality rate for cancers of the mouth, esophagus, larynx, and lung as well as for cirrhosis of the liver and stomach and duodenal ulcer.

SMOKING AND CANCER

1. A considerable amount of experimental work in many species of animals has demonstrated that certain ingredients identified in cigarette smoke can produce cancer.

2. Research has shown that cigarette smoking is causally related to lung cancer in both men and women.

3. The risk of developing cancer of the lung for pipe and cigar smokers is greater than in non-smokers, but much less than the risk incurred by cigarette smokers.

4. The risk of developing lung cancer increases with the duration of smoking, and the number of cigarettes smoked per day, and is diminished by discontinuing smoking.

5. The mortality ratios for cigarette smokers as against non-smokers are 11 to 1 for cancer of the lung and bronchus. There is also a substantially higher risk associated with cancer of the larynx, oral cavity, esophagus and urinary bladder.

6. There appears to be no significant relationship between gastric cancer and smoking.

SMOKING AND CARDIOVASCULAR DISEASES

1. Recent studies have revealed that cigarette smokers are more prone to die of certain cardiovascular disorders than non-smokers. The studies indicate that the ratio of death from these disorders between smokers and non-smokers is about 2 to 1. This ratio is affected by the number of cigarettes consumed.

2. Although little is known regarding the composition of cigarette smoke after it leaves the mouth and enters the lungs, it is believed that it contains no less than nine gases which are believed to be irritating to the lungs. 80 to 90% of the particles contained in cigarette smoke are retained in the mouth

and respiratory tract and lungs. Although the exact percentage is not known, it is believed that the vast majority of particles are deposited deeply into the respiratory tract.

3. Chronic brochitis is a very common condition in which excessive mucous secretion in the bronchioles causes recurrent coughing.

4. Emphysema, a frequent complication of chronic bronchitis, is a serious and often fatal disease characterized by enlared air sacs in the lung. It is the 8th cause of death in San Francisco and 10th California and the United States.

5. Chronic bronchities and emplysema are diseases of great public health importance in the United States. They are linked with the excess mortality of cigarette smokers.

SOME CONCLUSIONS

1. Cigarette smoking is the most important of the causes of chronic brochitis in the United States.

2. A relationship exists between pulmonary emphysema and cigarette smoking.

3. For the bulk of the population of the United States, the importance of cigarette smoking as a cause of chronic respiratory disease is much greater than that of atmospheric pollution.

4. Cough, sputum production, or the two combined, are consistently more frequent among cigarette smokers than among non-smokers.

5. Cigarette smoking is associated with a reduction in the efficiency of the lungs. Among males cigarette smokers have a greater prevalence of breathlessness than non-smokers.

6. Cigarette smoking does not appear to cause asthma.

7. Cigarette smokers have a moderately increased risk of death from influenza and pneumonia.

8. Although some people claim there are good effects from smoking, such as relaxation, most authorities agree that those "good effects" do not counter balance a definitely known health hazard.

STATE OF CALIFORNIA NARCOTIC PENALTIES

Narcotics	Adult Conviction	1st Offense Years	1st Offense Minimum	2nd Offense Years	2nd Offense Minimum	3rd Offense Years	3rd Offense Minimum
Heroin	Possession	2-10	2	5-10	5	15-life	15
Opium	Sales or furnishing	5-life	3	10-life	10	15-life	15
Morphine	Adult to minor Minor to minor	10-life 5 minimum	5	10-life 10 minimum	10	15-life	15
Codeine	Sale	1-10					
Dermerol							
Methadone							
Cocaine							
Marijuana							
Marijuana	Cultivating	1-10		2-20		5-life	
(Considered a narcotic under the law)	Possession for sale	2-20		5-15		10-life	
	Sale	5-life	3	5-life	5	10-life	10
	Adult to minor	10-life	5	10-life	10	15-life	15
Peyote	Cultivate/process	1-10		2-20			
	Possession	2-10		5-20	5	15-life	15
	Sale	5-life	2	10-life	5	15-life	15
Prescriptions	Forgery	6 mos.-1		10		10	
Addicts	Using/influence of	3 mos.-1					
	registration	Misdemeanor					

STATE OF CALIFORNIA NARCOTIC PENALTIES

Dangerous Drugs	Adult Conviction	1st Offense Years	2nd Offense Years
LSD, DMT, STP	Possession	$1,000 and/or 1	1-5
Depressants:	Sale (for)	1-3	2-10
Nembutal, Seconal,	Actual sale	1-5	2-10
etc. (barbiturates)	To minor	1-5	2-10
Miltown, Librium			
(tranquilizers)			
Stimulants:			
Benzedrine (Amphetamine)			
Methamphetamine (speed)			

LAWS PERTAINING TO NARCOTICS AND DANGEROUS DRUGS VIOLATIONS

FEDERAL LAWS

1. Harrison Narcotic Act of 1914 - basis of all narcotic laws
2. Import and Export Act of 1922 - this outlaws Heroin
3. Marijuana Tax Act - 1937
4. Boggs Act of 1950 - mandatory sentences for narcotic tax violations
5. Narcotic Control Act - 1956

STATE LAWS

A. Health and Safety Code (Div. 10)

(1) 11500 H & S Code - Possession of Narcotics (Heroin, Morphine, Percodan, Cocaine) (F)

(2) 11500.5 H & S Code - Possession of Narcotics with Intent to Sell (Heroin, Morphine, Percodan, Cocaine) (F)

(3) 11501 H & S Code - Sale of Narcotics (Heroin, Morphine, Percodan, Cocaine) (F)

(4) 11502 H & S Code - Sale of Narcotics to Juvenile (F)

(5) 11503 H & S Code - Offer to Sell Narcotics or Delivers Substance in Lieu of Narcotics (F)

(6) 11530 H & S Code - Possession of Marijuana/Harvesting or Cultivating (F)

(7) 11530.5 H & S Code - Possession of Marijuana with Intent to Sell (F)

(8) 11531 H & S Code - Sale of Marijuana (F)

(9) 11532 H & S Code - Sale of Marijuana to Juvenile (F)

(10) 11540 H & S Code - Possession of Peyote/Harvesting or Cultivating (F)

(11) 11721 H & S Code - Illegal Use or Under the Influence of narcotics (M)

(12) 11555 H & S Code - Illegal Possession of Narcotic Paraphernalia (M)

(13) 11556 H & S Code - Unlawful Presence or Visit Where Narcotics are Used (M)

(14) 11910 H & S Code - Possession of Dangerous Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (M) (Prior F)

(15) 11911 H & S Code - Possession of Dangerous Drugs with Intent to Sell, Amphetamine, Barbiturates, L.S.D., or D.M.T. (F)

(16) 11912 H & S Code - Sale of Dangerous Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (F)

(17) 11913 H & S Code - Sale or Furnishing Juvenile Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (Use of Minor) (F)

B. Business and Professions Code

(1) 4237 B & P Code - Forged/Fictitious/Altered Prescription (first offense (M) - second offense (F)

C. Penal Code

(1) 4573 P.C. - Bringing Narcotics Into County Jail (F)

(2) 4573.5 P.C. - Bringing Dangerous Drugs Into County Jail (F)

(3) 4573.6 P.C. - Possession of Narcotics or Dangerous Drugs in County Jail (F)

D. California Vehicle Code

(1) 12805 C.V.C. - The Department of Motor Vehicles shall not issue or renew a license to a person who is addicted to narcotics or habitually uses drugs.

(2) 13202 C.V.C. - A Court may revoke a driver's license upon conviction of any narcotic offense defined in Division 10 of the Health and Safety Code, starting at Section 11000, when the use of a motor vehicle is involved in the commission of the offense.

(3) 23101 C.V.C. - Any person driving under the influence of intoxicating liquor or combined liquor and any drug, and causes bodily injury is guilty of a felony. May be sentenced to the state prison not less than one year or in the county jail not less than one year.

(4) 23102 C.V.C. - Driving under the influence as above and no bodily harm, a misdemeanor.

(5) 23105 C.V.C. - Unlawful to drive while addicted to the use, or under the influence of narcotic drugs or amphetamine or any derivative thereof. A felony.

(6) 23106 C.V.C. - Unlawful for any person to drive under the influence of any drug, other than a narcotic or amphetamine or any derivative, must render him incapable of safely driving a vehicle. A misdemeanor.

(7) 23108 C.V.C. - Driving under the influence of any dangerous drug other than a narcotic and causes bodily injury. May be sent to state prison not less than one year, nor more than five, or county jail not less than 90 days nor more than one year. A felony.

E. Welfare and Institution Code

(1) 3100 W.I.C. - Voluntary commitment fortreatment of narcotic additic.

(2) 3100.6 W.I.C. - Involuntary commitment o narcotic addicts by health office or peace officer.

F. Harbor-Navigation Code

(1) Section 655 - Motorboat, vessel or on water-skis while under the influence of a narcotic or barbiturate. A. misdemeanor.

TEACHER REFERENCES

Books, pamphlets and periodicals

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2. Bloomquist, E. R.: "Marijuana." Beverly Hills: Glencoe Press, 1968
3. Bowen, Haskell L.: "Drug Facts." Santa Clara County Drug Information Center, 1968
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5. Bureau of Criminal Statistics. "Drug Arrests and Dispositions in California, 1967. Sacramento: California Department of Justice, 1968
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7. Kitzinger, Angela and Hill, Patricia J.: "Drug Abuse A Sourcebook and Guide for Teachers." Sacramento: California State Department of Education, 1967
8. Landis, James B. and Fletcher, Donald K.: "Drug Abuse A Manual for Law Enforcement Officers." Philadelphia: Smith Klein, and French Laboratories, 1966
9. McCarthy, Raymond G, (Revised by John J. Pasciutti): "Facts about Alcohol." Chicago: Science Research Associates, Inc., 1967
10. "Physicians Desk Reference to Pharmaceutical Specialties and Biologicals:" Oradell, New Jersy Medical Economics, Inc., annual
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12. Todd, Frances: "Narcotics and Dangerous Drugs A Resource Book for Teachers." San Francisco Unified School District, 1957
13. Todd, Frances: "Teaching About Alcohol." New York: McGraw-Hill Book Company, 1964
14. Vogel, Victor H. and Vogel, Virginia E.: "Facts About Narcotics and Other Dangerous Drugs." Chicago: Science Research Associates, Inc., 1967

15. U. S. Department of Health Education and Welfare: "A Guide for Teaching Poison Prevention in Kindergartens and Primary Grades." Washington, D. C: U. S. Government Printing Office, 1966

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SAN FRANCISCO UNIFIED SCHOOL DISTRICT

Sample Lesson Plans

DRUGS AND HAZARDOUS SUBSTANCES

Grades 10-12

For optional trial use, Fall term, 1969

Dr. Robert E. Jenkins
Superintendent of Schools

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

Sample Lesson Plans

DRUGS AND HAZARDOUS SUBSTANCES

Grades 10-12

For optional trial use, Fall term, 1969

Prepared by

Milton Axt, Jr., Galileo High School
Laura Johnson, George Washington High School

Edited by

John Freeman, Balboa High School
Eugene Huber, Teacher-Specialist, Health Education
Dr. Frances Todd, Supervisor, Health Education

Under the direction of

George Canrinus, Coordinator, Health, Physical Education, Recreation
Ralph Kauer, Assistant Superintendent, Secondary Schools
Dr. Raymond Pitts, Assistant Superintendent

GRADES 10-12

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DRUGS AND HAZARDOUS SUBSTANCES

GRADES 10-12

Concept

THE USE OF SUBSTANCES WHICH MODIFY BODY FUNCTIONING, FEELINGS AND BEHAVIOR ARISES FROM A VARIETY OF MOTIVATIONS AND MAY BE BENEFICIAL OR HARMFUL

Behavioral Objectives

The student

1. translates knowledge about the effects of various substances which modify body functioning, feelings and behavior into predictions about how these effects may manifest themselves under different physiological and environmental conditions

2. concludes that use, non-use, or misuse of drugs and medicines results from some dynamic of personal needs, social consequences, and the individuals perceptions about effects.

3. concludes that over-use and unnecessary use of any drug may threaten present and future health

4. analyzes reasons why smoking becomes habitual and a threat to future health

5. investigates methods of breaking the habit of smoking

6. differentiates between uses of alcoholic beverages which may be socially acceptable or harmless to many people and those which may produce immediate and situational, or slow developing chronic problems

7. cites the warning signs which may indicate impending alcoholism and discusses personal and social responsibility for its prevention, early identification, treatment, and rehabilitation.

8. explains the appeal and the possible dangers in use of self-prescribed mind-altering and hallucinogenic drugs

9. differentiates between the known and suspected short-range effects of certain dangerous drugs and their unpredictable effects later in life and upon children of the new generation

10. explains the possible effects of combining alcoholic beverages with stimulant, depressant, and hallucinogenic drugs

11. evaluates community resources for aiding youth and parents seeking help on drug related problems.

GRADES 10-12

Outline

Grade 10 A Unit in The Family Life Education Course

Immediate and long range effects of drugs and hazardous subtances
Decision making
Drug dependency
Personal, family, and community responsibilities
Personal and social motivations for drug misuse and abuse
Prevention, treatment, rehabilitation
Community resources
Legal controls

Grade 11 Health Education

Modern drugs used in treating and preventing illness
Drug misuse and abuse as a contributing cause of chronic and degenerative diseases and disorders

Grade 12 Civics 2

Drug misuse and abuse as an urban problem
Social and economic aspects of drug abuse
Community controls: local, state, national, international

GRADES 10-12

Learning Aids for Pupils

Grade 10

Pamphlets
1. McCarthy, Facts About Alcohol, 1967
2. Vogel, Facts About Narcotics and Dangerous Drugs, 1967
   U. S. Department of Health, Education and Welfare:
3. Marijuana, 1969
4. The Up and Down Drugs, 1969
5. LSD, 1969
6. Narcotics, 1969
   50 copies of each of the above pamphlets have been consigned to each school

A/V Aids
1. Alcohol Teaching Kit (transparencies), 1969
   Cleveland Health Museum: One copy consigned to each school
2. The Embattled Cell (motion picture), 21 min., 1968
   Borrow from Cancer Society, or Interagency Council on Smoking and Health

3. Marijuana (film strips and recordings), 30 min., 1969 Guidance Associates. One copy consigned to each school
4. LSD: The Acid World (film strips and recordings), 30 min., 1969 Guidance Associates. One copy consigned to each school
5. LSD, 25 (motion picture), 25 min., 1967 Q613.8-MS3
6. Dangerous Drugs Identification Kit (display), 1968 Winston. One copy consigned to each school
7. Drug Identification (slides), 1969. One set consigned to each school. SFUSD

Grade 11

Select from current catalogs of printed and visual materials of the Cancer Society, Heart Association, Association for Tuberculosis and Health, March of Dimes-National Foundation, Interagency Council on Smoking and Health, and other community health agencies.

GRADE 10

A UNIT IN THE FAMILY LIFE EDUCATION COURSE

To help pupils

1. discriminate between the known and suspected short-range effects of narcotics, dangerous drugs, alcohol, and nicotine and tar, and the unpredictable long-term effects on themselves, their families and the children of the next generation

2. apply knowledge about the action of substances which modify mental and physical functions and behavior to the decisions they make about smoking, drinking and experimenting with drugs

3. understand the nature of drug dependencies

4. analyze individual and social motivations for drug misuse and abuse

5. conclude that preventing and controlling drug abuse is a personal as well as a community responsibility

6. understand and respect the legal controls pertaining to drugs

7. evaluate community resources for aiding youth and parents seeking help on drug-realted problems.

Lesson 1

Concepts

1. Drugs commonly abused today are amphetamines, barbiturates, marijuana, LSD, and narcotics.

2. The inhaling of volatile chemicals is also classed as drug abuse.

Learning opportunities

1. Procure from the school drug information center, the school library and/or health agencies as many copies as possible of pupil references on the common drugs of abuse.

2. Assign individuals or committees to construct a chart which summarizes the important data on these drugs. Suggested headings for the chart are:

   Name of drug (marijuana, narcotics, LSD, amphetamines, barbiturates, volatile chemicals; some of these categories may be broken down into sub-headings, e.g., under narcotics, morphine and derivatives, cocaine, or, under amphetamines, "speed", wake-up pills, reducing pills)

   Drug category (stimulant, depressant, hallucinogen, tranquilizer, etc)

   Slang names

   Source (natural or synthetic)

   Medical use

   Method of taking

   Physiological effects, short range and long range

   Psychological effects, short range and long range

   Legal Status

3. Put completed chart on chalkboard or duplicate it for class discussion. Correct or revise as necessary.

Lesson 2

Concepts

1. Alcohol affects many physiological and psychological functions.

2. Excessive, prolonged and/or compulsive use of alcohol frequently triggers physical and psychological problems.

Learning opportunities

1. Procure pupil reference material on alcohol and alcoholism from the sources suggested above in lesson 1.

2. Assign idividuals or committees to construct a chart which summarizes the important data one:

   a. Alcohol taken in relatively small amounts
   b. Alcohol taken in relatively large amounts, occasionally
   c. Alcohol taken in relatively large amounts, regularly, over a period of several years, and/or taken compulsively

3. Put completed chart on chalkboard or duplicate it for class discussion. Correct or revise as necessary.

Lesson 3

Concepts

1. Recent research on smoking and disease gives scientific evidence that cigarette smoking is closely linked with lung cancer, circulatory disturbances and other serious health problems.

2. Each individual should carefully weigh the evidence concerning the health hazards of smoking before starting or continuing to smoke.

Learning opportunities

1. Procure pupil reference material on smoking from the sources suggested above in lesson 1.

2. Assign individuals or committees to construct a chart similar to the alcohol and drug charts which summarize the important data on nicotine and tars.

3. Put completed chart on chalkboard or duplicate it for class discussion. Correct and revise as necessary.

4. Combine the three charts the students have made to start a students' handbook. Duplicate and have students retain for reference throughout the unit. This reference provides an overview of the drugs to be studied further.

5. Discuss reasons that people smoke.

6. Have pupils compute the cost of a pack a day smoking habit for one month and one year.

7. Assign students to report changes in the incidence of smoking among adults, high school students, physicians, men, women, each year since the 1964 Surgeon General's Report.

8. Assign students to report on the program of the National Clearing House for Smoking and Health, and the national, state, and local Interagency Councils or Committees on Smoking and Health.

389-982 O - 70 - 12

9. Evaluate smoking ads for motivation and accuracy.

10. Show the film The Embattled Cell or other films suggested in the A/V list, and discuss.

11. Investigate local public and private group efforts to help people who want to stop smoking.

Lesson 4

Concepts

1. The effects of marijuana are not always predictable.

2. Drug dependence refers to both psychological and physical dependence on a drug.

Learning opportunities

1. Review marijuana in the student's handbook completed in the previous lesson.

2. Show the FS/R, Marijuana. Select from the accompanying teacher's guide the most appropriate learning opportunities and questions for discussion.

3. Differentiate between physiologic and psychologic dependency. Point out that marijuana may result in psychologic dependency. Discuss which of these dependencies is harder to overcome.

Lesson 5

Concepts

1. The dangerous drugs may cause physiologic and psychologic dependence if misused or abused.

2. The misuse and abuse of the dangerous drugs by some young people is a serious problem to individuals families and to society.

Learning opportunities

1. Review the dangerous drugs, (amphetamines, barbiturates, LDS and the volatile chemicals) in the student's handbook.

2. Show the FS/R, LSD. Select from the accompanying teacher's guide the most appropriate learning opportunities and questions for discussion.

3. Alternatively, show the film, LSD 25, and discuss.

4. In small groups, or as a class, discuss the social and psychological causes of the misuse of dangerous drugs by young people.

5. In small groups, or as a class, discuss the social and psychological effects of the misuse of dangerous drugs by young people

6. In small groups, or as a class, discuss the physiological effects of the dangerous drugs, especially those reported to be "in" drugs in your community. Include a consideration of the evidence that indicates damage in the progeny may result from the use of these drugs by an expectant mother because of dietary deficiencies, pre-natal infections, possible chromosomal changes, etc.

Lesson 6

Concepts

1. The abuse of narcotic drugs is usually the final step in drug abuse in which the individual becomes totally dependent on drugs

2. Persons who misuse or abuse the narcotic drugs are likely to destroy themselves physically, psychologically, morally, and financially to meet their driving need to keep themselves supplied with the drugs they crave.

Learning opportunities

1. Review the narcotic drugs in the students' handbook. The drugs reviewed should include morphine and morphine derivatives such as heroin, cocaine, codeine, and the synthetic narcotics (demerol and methodone).

2. Assign a committee to report on the relation between narcotic drug abuse and crime in San Francisco and California. The District Attorney's office or the city or state Narcotics and Dangerous Drug Bureaus are possible sources.

3. Assign a committee to investigate and report on local, state and federal facilities for the rehabilitation of hard narcotics users.

Lesson 7

Concepts

1. Legislation and other methods of control over illegal drug traffic is a concern and problem of local, state, and international agencies.

2. Respect for and compliance with the law is an obligation of good citizenship.

Learning opportunities

1. Provide each student with a copy of State of California Narcotic Penalties, and/or project it with an opaque projector, or make a transparency for projection with an overhead projector.

2. Use the student handbook as a reference to review the nature of the drugs mentioned on this chart. Add to the students' handbook pertinent information concerning the following drugs which have not been discussed previously: peyote, DMT, STP.

3. Show color slides of the drugs mentioned on the chart; or, project the appropriate pages of Drugs of Abuse on the opaque projector; or use the display of these drugs which is part of the Winston kit.

4. By panel discussion, committee reports or individual reports, interpret the penalties, discuss any differences between penalties for adults and for minors, and compare penalties for drug offenses to penalties for other crimes.

5. Assign a committee to procure and discuss the legislative measures of California and the federal government which are presently under consideration, or recently passed, relative to drug abuse.

6. Invite a probation or law enforcement officer to talk with the class on the laws, and on the difficulties of wholly enforcing them.

7. Invite a lawyer to talk to the class about the legal processes involved in the case of a minor who is arrested for a drug law violation.

8. Discuss the reasons why the drug laws should be respected even though everyone does not agree with laws as they now stand.

9. Invite a former prison inmate to discuss life inside a penal institution.

Lesson 8

Concepts

1. Excessive use of alcohol is often related to physical illness.

2. Excessive use of alcohol may affect a person psychologically.

3. Many accidents and crimes are related to the use of alcoholic beverages.

4. Critical attitudes are needed to evaluate advertising practices which are intended to increase the sale of alcoholic beverages.

Learning opportunities

1. Have students give reports on the relation between the excessive use of alcohol and cirrhosis of the liver, pneumonia, tuberculosis, malnutrition, diseases of the nervous system.

2. Discuss the degrees of alcoholism and the danger signs of impending dependency on alcohol, or alcoholism.

3. Visit or report from reading about agencies concerned with treating alcoholics such as AA, Alanon, Alateen, Council on Alcoholism (local, state, national), Department of Mental Health (local and state), National Institutes of Mental Health, other health, social, and welfare agencies.

4. List and discuss the 12 steps of AA. To what extent are these steps applicable to the abuse of dangerous drugs and narcotics?

5. Debate: "Can there be safe drinking?"

6. Discuss why adolescents incur more risks from drinking than do adults.

7. Assign a committee to look up and report on the relation between crime and accidents and drinking.

8. Discuss newspaper accounts of accidents and crimes related to drinking.

9. Assign a committee to inventory advertising practices related to alcoholic beverages. Notice the emphasis on social drinking, the use of these beverages by distinguished people, the association of drinking with social occasions and ceremonials. Note the lack of reference to alcoholism or other outcomes of excessive drinking, the correlation of buying beer and wine with staple foods. Evaluate the influence of this advertising on drinking practices, both moderate and excessive, of adults and youth.

10. Show the transparencies in the Alcohol Teaching Kit, and select from the accompanying teacher's guide the most suitable learning opportunities.

11. Write to the Licensed Beverage Industries, 155 E. 44th Street, New York 10017, for their Code of Ethics in Advertising. Discuss the extent to which this code is observed.

Lesson 9

Concepts

1. Motivations to use, misuse, abuse, or avoid using drugs, alcohol, and tobacco result from some dynamic of personal needs, social consequences, and the individual's perceptions about effects.

2. An understanding of one's own motivations is essential to wise decision-making.

Learning opportunities

1. Discuss the following questions:

   Are we a drug oriented society? If so, why? Do the mass media have a strong influence on personal decisions? Do many adults, as well as young people, take drugs unwisely?

   Do drugs make one more aware of oneself and others, or less?

   Do people take drugs to escape, or just to "feel good"?

   As people have more leisure time is drug abuse apt to increase? Defend your answer.

   Are the motivations to take drugs the same for city dwellers as for those who live outside the cities?

   Does the generation gap have any relation to drug use by young people?

   To what extent is curiosity a motive in drug experimentation?

   To what extent is rebellion against parents and/or society a motive in drug experimentation?

   How can you tell when drug use is becoming drug dependency?

   How can you tell when social drinking is becoming alcoholism?

   To what extent is peer pressure a strong motivating factor?

   Are we an "instant society"? If so, how might this relate to drug abuse?

   What are the characteristics of an emotionally healthy person? Is an emotionally healthy person likely to take drugs to escape?

   To what extent can more laws, revised laws, and/or increased law enforcement alleviate drug abuse problems?

2. Discuss evidences of maturity such as the ability to accept responsibility, to make decisions and accept the consequences of these decisions, to set up reasonable goals, to get along with others, to accept oneself, to face reality, to respect and care for one's body and mind, to evaluate short and long term advantages and disadvantages, to respect authority.

3. Discuss the relation between personality inadequacies and drug abuse.

   Note: Most of the above suggestions for discussion can be related to smoking and drinking as well as to the misuse and abuse of drugs.

Lesson 10

Learning opportunities

1. Obtain a current list of community agencies which offer help to smokers, drinkers and drug abusers who want help. The school site drug information center should have this list on file. Students may be able to suggest additions. Survey the various agencies, giving a brief description of each.

2. If feasible, ask volunteers to visit and report on some of the agencies. By prior arrangement, many agencies will recive small groups of young people. An alternative is to invite guest resource persons from one or more of the agencies to talk with the class. Plan time for questions and answers.

3. Ask a physician to discuss private medical care for drug dependents.

4. Investigate what churches are doing to help young people with drug problems. Invite a clergyman to meet with the class to discuss spiritual and religious aspects of helping youthful drug abusers, e.g., Teen Challenge.

5. Discuss as many alternatives to drug abuse as possible.

6. Ask pupils to recommend what additional community facilities are needed to help young people with their problems.

7. Discuss why it is important for parents to be involved in helping young people work out their problems. How can parents help?

8. Assign reports on state and federal facilities for the rehabilitation of hard core narcotic and alcohol dependents.

Evaluation

1. Organize a student symposium or mock community meeting on the prevention and control of drug abuse in San Francisco.

2. Panel discussion: how teenagers can handle discomforts and problems of growing up and achieving independence without using drugs or alcohol.

3. Plan and carry out a noontime program on drug abuse which may be attended on a voluntary basis by any member of the school.

4. Set up a "Speakers' Bureau"—teams of two or three students who can serve as resource persons for classes in a nearby junior high or elementary school.

5. Have a committee develop a realistic problem situation involving the use of alcoholic beverages or drugs by teen agers. Relate the effects of drinking and/or using drugs such as marijuana or "speed" to accidents, crimes, school drop-outs, and conflicts with parents, teachers and other authority figures.

6. After reviewing the student handbook on the scientific aspects of the drug problem, add a section on motivations and alternative behaviors, and a section on legal controls. You may wish to send the completed handbook home and invite parent evaluation.

7. Jointly plan a student-parent-teacher program for presentation at a faculty meeting or PTA meeting on themes such as Smoking and Diseases, Is Smoking Worth It?, Pot's a Put-On, Can There Be Safe Drinking?, Speed Kills, Ads Are Awful, Are We A Drug-Oriented Society?, Pot's Rot, SOS: Stamp Out Stupidity.

8. Develop an outline for a three to six week mini-course on drug problems.

GRADE 11

HEALTH EDUCATION

Objectives

To help pupils

1. understand that the misuse and abuse of alcohol, tobacco and drugs is an important contributing cause of chronic and degenerative diseases and disorders

2. become aware that many formerly incurable and fatal diseases and disorders are now preventable, controllable, or curable by the wise use of legitimate drugs

3. concluded that over-use and unnecessary use of any drug may threaten present and future health

Suggestions for integrating instruction in the health education course of study

It is suggested that instruction relevant to the above objectives be integrated into the 11th grade course of study in health education.

As outlined in the Preliminary Guide to Health and Family Life Education this course includes a study of chronic and degenerative diseases and disorders, many of which are closely related to drug use, abuse and misuse

Alcohol abuse is closely related to cirrhosis of the liver, pneumonia, tuberculosis, malnutrition and several disorders of the nervous system.

Smoking is closely related to lung cancer and to several impairments of the heart and circulatory system.

Abuse and misuse of drugs and volatile chemicals can cause or contribute to other causes of impairment of many of the vital organs, and to mental and emotional illnesses.

Properly administered medication can alleviate many diseases and disorders.

Free and inexpensive printed and visual instructional materials for teachers and pupils are obtainable from the Interagency Council on Smoking and Health, the Heart Association, the Cancer Society, the Mental Health Society, the Tuberculosis and Health Association, Alcoholics Anonymous, Council on Alcoholism, and others.

GRADE 12

SENIOR CIVICS 2

Drug abuse is an integral part of the Urban Problems area of Senior Civics 2.

Objectives

To help pupils

1. synthesize previously acquired knowledge about drugs and drug-related problems so as to enable them to make wise personal decisions about drug use

2. participate in the formulation of solutions to the drug problems in society

Suggestions for integrating instruction in the regular course of study

Research and discussion may be centered on questions such as the following:

Why do people misuse and abuse drugs?

Does society benefit from the wise use of medicines?

How are societal problems such as crime and accidents related to drug abuse?

Should legal controls on drugs be changed?

Are there adequate community facilities for aid for people with drug-related problems?

What is the economic cost of drug abuse?

Why are tobacco and alcohol accepted by society while drugs are rejected?

Other than laws, what societal controls can you recommend to alleviate the drug problem?

What are other cities and other countries doing about social controls relevant to the drug problem?

What improvements are needed to make international drug controls more effective?

Are there relationships between national security and drug problems?

VOCABULARY ... Simple definitions for pupils

1. Drug. Chemicals which may affect body structure or function, or alter behavior and which if used legitmately and wisely, may prevent, treat or cure illness.

2. Drug misuse or abuse. Mistreatment if the body or mind by the improper or excessive use of drugs.

3. Dependence. A compulsion to take drugs.

4. Tolerance. A tendency to need increased dosage to obtain the desires of desirable effect.

5. Depressant. A substance which speeds up the normal activities of the body or mind, "down" drugs, or "downers".

6. Stimulant. A substance which speeds up the normal activities of the body or mind, "up" drugs, or "uppers".

7. Tranquilizer. A substance which has a calming effect on the mind.

8. Hallucinogen. A substance which may cause a person to experience unreal sight, sounds of feelings; e.g., LSD.

9. Narcotic. Medically, a substance which induces sleep or masks pain; legally, a classification of certain of the most hazardous drugs; e.g., morphine, heroin.

10. Amphetamines. A chemical family of stimulant drugs which mask fatique, or depress appetite; e.g., pep pills, reducing pills, "speed".

11. Barbiturates. A chemical family of depressant drugs which induce relaxation and sleep, e.g., sleeping pills.

12. Inhalant. A substance which, if inhaled in large amount, may cause intoxication or unconsciousness; e.g., certain glues.

13. Over-the-counter drug. A drug which may be purchased without a prescription; commonly called OTC drugs; e.g., aspirin.

14. Prescription drug. A drug which may be purchased only if prescribed by a physician.

INFORMATION ABOUT ALCOHOL

GENERAL INFORMATION

1. The chief alcoholic beverage consumed in this country is beer, followed by the distilled liquors, with the wines a distant third. Americans spend about one out of every eight food dollars for alcoholic beverages.

2. About two-thirds of the people in the United States over 15 years of age drink to some extent. In San Francisco, it is estimated that 9 out of 10 people over 16 drink at least occasionally.

3. Many nationwide surveys show that about 67% of the high school students sampled have had some experience drinking as did almost half (48%) of the grade school students. Local authorities believe that in San Francisco the percentage is higher than the national norms.

4. Most students have already made the decision whether or not to drink by the time they graduate from high school.

5. Regional, subcultural and ethnic drinking patterns are clearly reflected in the drinking habits of adults.

6. The family is a dominant force in determining future drinking patterns of their children.

UNIQUE RISKS OF TEEN-AGE DRINKING

1. Since they are generally smaller and consequently weigh less, adolescents are affected more quickly and more severely by alcohol than adults.

2. The intense emotional response to situations characteristic of adolescents predisposes this group to be more susceptible to psychological intoxication to the extent that even one drink may result in erratic behavior.

3. The use of alcohol by adolescents as a means of coping with conflicts prevents the development of skills needed to solve the many problems of daily life.

4. The body tends to reject foreign substances on initial contact with the result that adolescents are more likely to become ill after drinking than are adults who have been accustomed to alcohol.

5. Recently learned skills are adversely affected by even small amounts of alcohol so that the combination of inexperienced drivers and inexperienced drinkers constitute a potentially dangerous situation.

6. The use of alcohol may reduce the desire for foods of adequate dietary value, at a time when rapid growth necessitates the maintenance of good nutritional practices.

NATURE OF ALCOHOLIC BEVERAGES

1. Ethyl alcohol is the principal intoxicating agent of most alcoholic beverages.

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2. The non-distilled alcoholic beverages such as wine, beer, ale, port, and stout are created through a process called fermentation.

3. Fermentation will not produce alcoholic beverages over 15%. In order to produce beverages with alcoholic content over 15%, a process called distillation must be employed or more alcohol must be added as is the case in making fortified wines such as port or sherry.

4. Distilled beverages such as whiskey, brandy, rum and vodka are made by collecting the steam which is a product of boiling a starchy substance.

5. Although alcohol may be classified as a food, it is a poor food from a nutritional standpoint because it lacks vitamins and minerals. Alcohol does release heat and energy. It liberates more calories than carbohydrates and less than fats.

METABOLISM OF ALCOHOL

1. Abscrption is the process whereby food from the stomach progresses to the bloodstream. The rate of absorption may be affected by food in the stomach, speed of drinking, choice of beverage, and many other variable factors such as the condition of the liver, the presence of drugs, malnutriton, and whether or not alcohol is taken with food.

2. Oxidation is the process by which the dissolved alcohol in the blood is mixed with oxygen resulting in the release of heat and energy. During this process the alcohol undergoes changes in the liver before it is converted to heat and energy. Each individual burns alcohol at his own unique rate. This rate is in part affected by body size Large individuals can usually consume more alcohol than smaller persons without undue effects because they have more fluids in their bodies in which the alcohol is diluted.

SOME EFFECTS OF ALCOHOL

1. Alcohol is not a stimulant but rather a depressant and even small concentrations affect the higher brain centers. The intoxicating action of alcohol affects the brain causing impairment of its normal functioning which in turn results in abnormal activities of the organs controlled by the brain. In small doses it has a sedative effect, in larger doses an analgesic or pain killing effect, and in even larger doses a hypnotic effect. If the dose is great enough, death may result through the paralysis of the brain centers which control breathing and heart action.

2. The exact action of alcohol on the brain remains obscure.

3. Alcohol affects the function of various parts of the body, not the structure. Organic changes may accompany chronic alcoholism because of long standing nutritional deficiencies.

4. Personality traits such as aggression, timidity, superiority or inadequacy and other expressions of feelings not normally observed

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in specific individuals except when drinking, are not created by the action of alcohol but simply released as formerly suppressed characteristics of the individual's existent personality. This condition arises because of the depressant effect of alcohol on the parts of the brain which normally control inhibitions.

5. Even small amounts of alcohol may reduce one's ability to concentrate.

6. Deterioration of judgment and self-control with accompanying impairment of hearing, sight and touch is evident before any muscular decline.

7. Research studies substantiate the fact that alcohol creates a sense of well being which leads to over-confidence, inflated ego and a willingness to take a chance.

8. The detrimental effects of alcohol on manual or motor skill increases in proportion to the:
   a. complexity of the skill: the more complicated skills are adversely affected first.
   b. familiarity of the skill: newest learning is adversely affected first.
   c. drinking experience of the individual.
   d. individual capacity for self-control.

9. Alcohol increases the length of reaction time.

10. The risk of intoxication is neither enhanced nor diminished by combining different alcoholic beverages, but the likelihood of developing nausea is increased.

11. In small amounts, alcohol may increase appetite and aid digestion due to an increase in the digestive enzymes, but large amounts may result in over-acidity and discomfort.

12. The warmth attributed to alcohol occurs because of the dilation of capillaries near the surface of the skin. This is a false sensation, however, since the body temperature actually falls after this short lived reaction.

13. The lowered inhibitions and decreased anxiety level which follow drinking may increase the desire for sexual activity. Excessive drinking, however, decidedly impairs the ability to consummate such an act.

14. Assuming that conditions which affect absorption are equal, large individuals can drink more than smaller individuals before showing adverse effects since they have more fluid in the body by which to dilute the alcohol, thereby lowering its concentration. Psychological factors also significantly influence the onset of adverse behavior patterns which result.

15. Casual observations of drinking behavior point out the fact that the same amount of alcohol affects people differently. In many instances the phenomenon cannot be explained by differences in body size. In these cases the answer is most likely provided by psychological factors which are of significant

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influence. The three most powerful psychological influences involve the individual's susceptibility to suggestion, his mood, and his expectations at the time of drinking. As a result, "nervousness" may be increased or decreased by alcohol.

16. Nausea or vomiting after drinking may be explained by a peculiarity called pylorospasm. This is the abnormal functioning of the valve leading from the stomach to the small intestines, causing a reverse in the normal peristalsis, or muscular contractions which move the food from the stomach to the small intestines.

17. The sedative effect of alcohol and the complicated nature of driving are incompatible. The greatest of all human traffic hazards is is an inexperienced driver who is ordinarily easily upset and who takes an unaccustomed drink or two before venturing out on the highway. Almost all teen-agers and some adults fall into this category. At least 50% of serious accidents are associated with drinking.

PROBLEM DRINKING

1. Problem drinking may be defined as the misuse of alcohol under any or all of the following conditions:
   a. on inappropriate occasions
   b. in excessive amounts
   c. with resultant behavior detrimental to the individual and his associates

2. Well over 90% of those who use alcoholic beverages do so in limited amounts on appropriate occasions and with no adverse effects.

3. Research studies indicate that one in 14 to 17 drinkers become problem drinkers, and of this group of problem drinkers one in about 17 becomes an alcoholic.

4. Problem drinking and successful family membership often are incompatible.

5. Criminologists generally agree that excessive drinking rarely is the prime cause of criminal behavior although many prison inmates have drinking problems.

ALCOHOLISM

1. Drinkers who become alcoholics can be described as those individuals who have lost control of their drinking habits to the extent that they are intoxicated frequently or for several hours or days at a time, drink at inappropriate times, gulp drinks, lost interest in activities other than drinking, endanger their health through preoccupation with drinking, and those who drink not by choice, but by compulsion.

2. Alcoholism is a major public health problem that affects 4 to 5 million people in the United States, or approximately 4% of the adult population. The proportion of alcoholics has not increased over the past decade.

INFORMATION ABOUT ALCOHOL

3. Alcoholism is the fourth biggest public health problem, superceded only by heart disease, cancer and accidents.

4. Alcoholism, by the definition officially adapted by the World Health Organization and the American Medical Association, is a disease. An alcoholic, therefore, is a sick person, not a criminal nor moral reprobate.

5. The rate of alcoholism in San Francisco is the highest in the nation for a city of comparable size.

6. Cirrhosis of the liver, often but not always associated with excessive drinking over a long period of time, is the 4th leading cause of death in San Francisco; in California it is 6th; in the United States, 9th. (1967 statistics, San Francisco Department of Public Health.)

7. The causes of alcoholism are still unknown. It is a complex illness which undoubtedly has biological, psychological, and sociological components.

8. Most alcoholics are not on Skid Row. Almost all of them live in typical residential districts and are employed.

9. Alcoholics are susceptible to nutritional deficiency diseases. Eight ounces of distilled liquor provides a 150 pound man with two-thirds of his caloric requirement for one day. Typically, the heavy drinker is disinterested in food because his caloric needs, though not his nutritional needs, have been fairly well met by alcohol.

HANG-OVERS

1. The discomfort which follows excessive drinking results from a disturbance in the equilibrium of fluids in and around the cells.

2. Time, sleep, and rest are the only cures for this condition.

3. Popular folklore that exercise, fresh air, cold showers, black coffee and such will hasten recovery from excessive drinking has no scientific foundation. A temporary exhilaration may result from such "treatment" but the level of intoxication remains the same.

INFORMATION RELEVANT TO PREVENTING INTOXICATION

1. The only sure preventative is abstinence.

2. Drink sparingly, slowly, and choose well-diluted drinks instead of more concentrated ones.

3. Eat before and during drinking. Foods eaten with drinks "insulate" against the rapid effects of alcohol. Proteins are more effective for this purpose than fats or starches.

4. Carbonated dilutants, such as soda water, speed the action of alcohol; water used as a mix slows down alcohol's action.

5. The effects of alcohol are felt more quickly at high altitudes than at sea level.

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6. Small individuals who do sedentary work will feel the effects of the same amount of alcohol more quickly than large individuals who do hard physical labor.

7. If you must drive after drinking, wait at least one hour after the last drink before taking the wheel. This time lapse permits the body's oxidation mechanism to catch up and thus utilize the alcohol.

8. Taking drugs or medicine of any kind with an alcoholic beverage is extremely risky because of the synergistic effects of many drugs. For example, a highball plus a sedative may not be just twice as potent as either alone; it may be at least four times as potent.

SUGGESTIONS FOR TEACHING ABOUT ALCOHOL

1. Since today's youth will probably follow the example of their elders, most of them will drink to some extent at some time in their lives. Along with pointing out the legal aspects and mental health advantages of abstinence during adolescence, teach enough about alcohol's varied effects so students will understand how to minimize the risks of intoxication when and if they or their associates ever drink.

2. Distinguish clearly between drinking, drunkenness, and alcoholism. The first is a social custom acceptable to most adults or appropriate occasions. The second is rarely socially acceptable and is always risky. The latter is a disease or disorder.

3. Since young people are more interested in the prsent than the future, concentrate on the subject of "drinking" rather than alcoholism. Older teen-agers will be more interested in alcoholism as a social problem than as a threat to themselves in later life.

4. Be sure students know where to get help for alcohol-related problems. Among the resources are medical and religious advisers, Alcoholics Anonymous (for adults with alcohol-related problems), Alanon (for family members of all ages who have a loved-one with an alcohol problem), and Alateen (for teen-agers with an alcohol problem).

5. Emphasize that the most immediate effects of alcohol are impaired judgment and diminished inhibitions. Tie this in with discussion of dating behavior.

6. Help the student realize that drinking never solves any problem and frequently creates new and more serious problems.

7. Impress the students with the fact that an alcoholic is a person who is ill and in need of treatment and understanding rather than censure.

Reference:
F. Todd, Teaching About Alcohol

INFORMATION ABOUT DRUG USE AND MISUSE

THE DRUG MISUSE PROBLEM

Arrests of California juveniles for drug offenses increased 24% over the five year period 1961-1966. In San Francisco, juvenile arrests increased from 9 in 1963 to an overwhelming 167 in 1966, representing an increase of well over 1500%. The average age of the offenders is 16 years. Law enforcement agencies believe that arrest statistics represent only an extremely small percentage of the actual incidence of illegal juvenile drug usage.

TERMINOLOGY

1. **Drug:** any non-food substance, medicinal or non-medicinal, which may be potentially harmful to the individual or society.

2. **Drug misuse:** self-administration of any drug to the extent that the individual or society may be harmed.

3. **Dependence:** according to the World Health Organization, dependence means "a state arising from repeated administration of a drug on a periodic or continual basis". The terms "addiction" and "habituation" are no longer used by most authorities. The use of the more general term, "dependence", requires delineating the exact drug which one is discussing, e.g., drug dependence of the opiate type.

4. **Tolerance:** a physiological condition whereby the drug user is forced to increase steadily the dosages of the drug to realize the desired effects.

OPIATES

1. **Medicial use:** relief of pain.

2. **Examples:** morphine, codeine and other opium derivatives, heroin (produced synthetically from morphine), percodan.

3. **Usual method of use:** intravenous injection.

4. **Effects:** drowsiness, sleep; **side effects:** nausea, vomiting, constipation, itching, constriction of pupils, slow breathing.

5. **Heroin.**

   a. Produces "high" or "kick" of almost orgasmic nature, followed by "nod" or state of euphoria or oblivion.
   b. Withdrawal symptoms severe.
   c. Diminishes sexual desire and activity.
   d. Tolerance develops quickly.
   e. Damage to tissues is rare.
   f. Rarely used by school-age youth.

6. **Opiates in cough syrup**

   a. Use by youth believed fairly common, but difficult to assess extent accurately.
   b. Many cough syrups containing opiates also contain an emetic which tends to reduce change of dependency.

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DEPRESSANTS: Barbiturates and Tranquilizers

1. Barbiturates: (commonest drug which produces dependence)
    a. Medical uses: sedative, sleep producer, control of disorders such as epilepsy, high blood pressure, gastrointestinal illnesses.
    b. Examples: drugs under trade names of seconal, amytal, nembutal.
    c. Safety: usually safe if used exactly as prescribed.
    d. Usual form: pills, capsules.
    e. Symptoms of abuse: intoxication similar to that of alcohol; slurred speech, staggering gait, sluggish reactions, erratic behavior, laughs or cries easily.
    f. Withdrawal from a dependent individual can cause convulsions which can be fatal if untreated.
    g. Using barbiturates and alcohol at the same time can be extremely dangerous because of the synergistic effects of the drugs.
    h. Death rate from accidental or intentional excessive use is very high.
    i. Physiological and psychological dependence may result from excessive use.

2. Tranquilizers
    a. Medical use: relief of minor mental or emotional disorder.
    b. Psychological and physiological dependence may result from excessive use.
    c. Withdrawal from dependent individual can cause convulsions which can be fatal if untreated.

STIMULANTS: Cocaine and Amphetamines

1. Cocaine
    a. Derived from leaves of coca tree.
    b. No longer used medically except as local anaesthetic.
    c. Widely used in parts of Latin-American, where dependence is common.
    d. Effects: reduction of fatigue, talkativeness, euphoria, increased muscular strength, hallucinations, followed by depression.

2. Amphetamines
    a. Medical use: treatment of obesity, depression, hypoactivity, behavioral disorders in children, excessive sleepiness.
    b. Examples: trade names such as dexedrine, methedrine or metamphetamine ("crystal" or "speed"), benzedrine.
    c. Effects: produces feeling of well-being, counteracts depression, inhibits appetite, masks fatigue, increases alertness.
    d. Effects of misuse: psychological but not physiological dependence, increased tolerance requiring dosage many times that used medically; restlessness, talkativeness, excitability, insomnia, profuse perspiration, increased urinary frequency, tremor; if used intravenously, psychotic behavior may result.

e. Frequently misused by students to stay awake to study for final examinations, and by drivers on long motor trips.

HALLUCINOGENS

1. Medical use: experimental medical use of LSD in the treatment of alcoholism and certain psycho-sexual disorders has been reported as potentially successful; other hallucinogens have no medical use.

2. Examples: LSD, DMT, peyote, psilocybin, mescaline, marihuana.

3. Effects: distorted sensory perceptions, psychological dependence; no physical dependence is believed to be produced, no physical symptoms occur on withdrawal.

4. LSD

a. Effects: visual, auditory and tactile hallucinations, changes in perception, thought, mood, activity, time sense, comprehension; some "trips" are characterized by panic, disorientation, severe depression.

b. Lasting effects: in some users, may include psychotic behavior, even in persons who previously exhibited no signs of emotional instability.

c. Recurrence of psychotic effects may occur weeks or months after dosage.

d. Epileptic seizures may be triggered.

e. There is some evidence that genetic damage may occur and adversely affect progeny.

f. Claims by proponents of improved functional efficiency and expanded consciousness have not been proven by objective investigation; on the contrary, impaired functioning results.

g. Many suicides and other acts of violence have occurred while individuals were under the influence of LSD.

h. Patterns of LSD usage: many adolescents are particularly interested in LSD since this is the age group in which the search for identity, exploration, attempt to achieve adult status through rebellion against society, and the seeking of solutions to personal conflicts, plays such a significant role. They believe LSD may provide the solution to one or more of these problems. Newspapers, television, radio, and even prominent persons have glorified LSD to the extent that pushers merely have to supply the drug to customers rather than persuade or induce them to indulge in its use. Dr. Sidney Cohen classified the LSD user as follows:

(1) The Explorer: curious to experience sensory awareness characteristic of the drug.

(2) The Social LSD Takers: provides a common bond for sense of belonging.

(3) Hedonistic Group: takes the drug for kicks. Among this group are those who are dissatisfied with reality. LSD is used as a means of withdrawal and continuous escapism.

(4) Magic Pill Group: hope LSD will cure them of what they really are:

emotionally immature individuals who are probably pre-psychotic.

(5) Artistic Group: attempt to see things differently through altered perception; common throughout history.

(6) Religious Seekers: believe LSD provides answers to questions about the universe and solutions to one's personal problems.

(7) Accidental Takers: this group usually consists of children but also includes some adults who have been given the drug without their knowledge.

5. Mescaline, psilocybin, peyote, DMT produce effects similar to LSD, but the effects are usually less intense and are of shorter duration.

6. MARIHUANA

a. Medical use: none.
b. Usual method of use: smoked or eaten.
c. Effects: psychological dependence, particularly in susceptible individuals, distortion of sense of time and distance; euphoria; feeling of exaltation; dreaming; and sometimes hallucinations; panic or fear may result; user may be very talkative, or very quiet and drowsy; effects are unreliable and unpredicitable.
d. Physical dependence, abstinence syndrome, physical damage do not develop.
e. In San Francisco, 59% of the juvenile drug arrests involved marihuana users. (1966)
f. Harm to society is derived from economic consequences of the impairment of the individual's social functions and his enhanced proneness to asocial and antisocial behavior.

SOLVENTS

1. Examples: glue, gasoline, paint thinners, lighter fluid, coolants and other volatile chemicals.

2. Effects: state of excitation and exhilaration similar to alcoholic intoxication, often characterized by blurred vision, slurred speech, loss of balance, black-outs; prolonged use may result in anemia, mental deterioration, liver damage, and death.

3. Users sometimes use plastic bags to hold the glue or solvent up to their face, thus risking suffocation.

4. Misuse is usually limited to individuals in late childhood or early adolescence, and is most frequent among children with a history of delinquent behavior.

SOCIAL ASPECTS OF DRUG MISUSE

1. Society should accept the existence of and differentiate between the occasional or spree drug user and the chronic abuser to whom drug abuse is a way of life.

2. The chronic abuser is a sick individual and should be treated as such.

3. Drug misuse is a sympton of a deep, underlying disorder; it may range from teen-age rebillion to sever disorders, and is often characterized by loneliness and alienation.

4. Legal restriction on drugs has been part of society since the dawn of history and is a social necessity.

5. The family is the prime influence on the prevention of drug misuse by the young. Parental love, care, and guidance particularly during the years of late childhood and adolescence, insulate the child against loneliness and alienation, and usually young people thus influenced have no need to escape by means of drug misuse.

TIPS FOR TEACHING ABOUT DRUG USE AND MISUSE

1. Aim for an honest balance between the conservatively alarmist and the defiantly radical. Differentiate between facts, beliefs, and opinions.

2. Narrow the communication gap between the generations:
    a. Be familiar with the sources from which teen-agers get their information as well as the sources teachers consider prestigious.
    b. Know the jargon of teen-agers and the drug-using subculture.
    c. Let pupils air their views freely in an atmosphere of mutual curiosity and a sharing of opinion and experience.
    d. Listen and look for differences between pupils' words and actions and their underlying needs and motives.
    e. Be constantly aware that social attitudes which create undue stress situations may do more lasting harm than a one or two time use of most drugs.

3. Guide pupils to differentiate between:
    a. Physiological effects of drugs and the influence of drugs on psychological effectiveness.
    b. Honest scientific research and pseudo-research.
    c. Medical views and moral views.
    d. The often divergent viewpoints of health scientists, criminologists, and human rights proponents.
    e. Risks inherent in the use of any drug, and the risks of known or suspected dangerous drugs.
    f. Risks and benefits of the use of dangerous drugs, short term and long term, physiological, psychological, and social.

4. Explore with pupils some of the reasons teen-agers take dangerous drugs.

5. Minimize teacher-imparted information. Substitute dialogue-centered instruction. Center activities around situations and concerns that are real or realistic to the pupils.

6. Pre-test: you may be amazed at how well-informed your pupils are on a subject of deep interest to them.

7. Use examples from current mass media. Help students evaluate reporting, detect bias, identify honest onctroversy, differentiate

INFORMATION ABOUT DRUG USE AND MISUSE

between sensationalism and scientific findings.

8. Consider: Have we overstressed happiness and fun in our society? To what degree is stress related to human productivity and personal and social well-being? How does this relate to the drug subculture?

9. Explore with pupils: If a person who tuned in, turned on, and dropped out wants to tune out, turn off, and drop back, how can he be helped?

10. Know some of the reasons why marihuana is more risky than alcohol; (illegal, effects less predictable and reliable, users isolate themselves from mainstream social activities of the majority of people).

11. Gear your teaching to a realistic target group. You'll not convert the extremists. You'll probably reinforce the beliefs of many of your pupils. Your instruction is most likely to influence those who are not' too strongly committed and who are still open minded.

12. Be honest. If you don't know the answer to a question, admit it. If there are controversial answers, give all sides of the story. If pupils ask your opinion or beliefs, state them. Don't scold, threaten or exhort. Remember: few teachers but most teen-agers are under peer pressure to experiment with drugs.

13. Our young people believe in physical, material, intellectual, psychological, and spiritual fulfillment. Explore with them how drug misuse may damage or prevent their achieving self-fulfillment. Help them see that if they get "hung-up" on drugs they will have "copped-out" on themselves.

14. Finally, be aware that during the teen years acceptability as a worthwhile person is harder to come by than at any other time of life. Younger children, and adults of all age groups, do not readily accept teen-agers and their behavior. Acceptance by teen-agers of members of their own age group is even a greater problem.

References:

California State Department of Education, Drug Abuse, A Source Book and Guide for Teacher, 1967

AAHPER-NEA, Drug Abuse, Escape to Nowhere, 1967

INFORMATION ABOUT SMOKING

PREVALENCE

1. A survey conducted by the Advisory Committee to the Surgeon General indicates that less than 5% of the boys and 1% of the girls smoke regularly before the age of 12. By the 12th grade, however, 40 to 55% have been found to be smokers.

2. Estimates of smoking incidence by age 25 are believed to be approximately 60% in men and 36% in women. Smoking prevalence continues to increase until age 35 or 40, after which a decline occurs, until at age 65, 20% of the men and 4% of the women are smokers.

PATTERNS OF SMOKING BEHAVIOR

1. Most authorities and studies agree that the teen years are crucial in determining smoking behavior in that the majority will decide whether or not to develop the practice during this period.

2. Smoking behavior is often strongly influenced by the permissive or prohibitive attitudes of family and friends.

3. There does not appear to be any definite "smoker personality". Certain personality traits are more likely to be observed in smokers; such as extroversion, neuroticism and a more than usual amount of psychosomatic problems.

4. Stressful or challenging experiences are believed to be factors influencing the beginning smoker as well as in reinforcing the habit and the number of cigarettes consumed.

5. The habitual use of tobacco is associated primarily with psycho-social drives which are strengthened by the drug effects on the central nervous system.

6. There is ample evidence to support the fact that the smoking habit becomes compulsive in some heavy smokers. This dependency is psychological in nature. There are no physical withdrawal symptoms which characterize physical dependence upon abstinence from smoking.

7. The motivation for using tobacco must be considerable since it is well known that among beginning smokers certain toxic or poisonous effects such as nausea and vomiting often accompany the initial usage of tobacco.

8. Statistics prove that giving up the smoking habit is extremely difficult for many individuals. Of the methods employed to cure the habit, those which deal with the psychogenic drives have been more successful.

9. It has been suggested that the most effective way to cut down on the number of smokers among young people would be to eliminate the habit among the parents, since it has been demonstrated in some studies that there is a strong correlation between parents' smoking behavior and that of their children. The similarity in children and parent habits constitutes,

according to some authorities, evidence that beginning smoking is initiated by an imitation of and wish for, adult status.

SMOKING AND MORTALITY

1. Observations of thousands of patients and autopsy studies show that many kinds of damage to body function, organs, cells, and tissue occur more frequently and severely in smokers than in non-smokers.

2. The mortality rate for male cigarette smokers is 70% higher than for non-smokers. In general, the greater the number of cigarettes smoked daily the higher the death rate.

3. The mortality rate for smokers who inhale is greater than for smokers who do not. The mortality rate of cigarette smokers appears to be considerably higher than for pipe and cigar smokers. Smokers in the latter two categories, however, have a relatively high mortality rate for cancers of the mouth, esophagus, larynx, and lung as well as for cirrhosis of the liver and stomach and duodenal ulcer.

SMOKING AND CANCER

1. A considerable amount of experimental work in many species of animals has demonstrated that certain ingredients identified in cigarette smoke can produce cancer.

2. Research has shown that cigarette smoking is causally related to lung cancer in both men and women.

3. The risk of developing cancer of the lung for pipe and cigar smokers is greater than in non-smokers, but much less than the risk incurred by cigarette smokers.

4. The risk of developing lung cancer increases with the duration of smoking, and the number of cigarettes smoked per day, and is diminished by discontinuing smoking.

5. The mortality ratios for cigarette smokers as against non-smokers are 11 to 1 for cancer of the lung and bronchus. There is also a substantially higher risk associated with cancer of the larynx, oral cavity, esophagus and urinary bladder.

6. There appears to be no significant relationship between gastric cancer and smoking.

SMOKING AND CARDIOVASCULAR DISEASES

1. Recent studies have revealed that cigarette smokers are more prone to die of certain cardiovascular disorders than non-smokers. The studies indicate that the ratio of death from these disorders between smokers and non-smokers is about 2 to 1. This ratio is affected by the number of cigarettes consumed.

2. Although little is known regarding the composition of cigarette smoke after it leaves the mouth and enters the lungs, it is believed that it contains no less than nine gases which are believed to be irritating to the lungs. 80 to 90% of the particles contained in cigarette smoke are retained in the mouth

and respiratory tract and lungs. Although the exact percentage is not known, it is believed that the vast majority of particles are deposited deeply into the respiratory tract.

3. Chronic brochitis is a very common condition in which excessive mucous secretion in the bronchioles causes recurrent coughing.

4. Emphysema, a frequent complication of chronic bronchitis, is a serious and often fatal disease characterized by enlared air sacs in the lung. It is the 8th cause of death in San Francisco and 10th California and the United States.

5. Chronic bronchities and emplysema are diseases of great public health importance in the United States. They are linked with the excess mortality of cigarette smokers.

SOME CONCLUSIONS

1. Cigarette smoking is the most important of the causes of chronic brochitis in the United States.

2. A relationship exists between pulmonary emphysema and cigarette smoking.

3. For the bulk of the population of the United States, the importance of cigarette smoking as a cause of chronic respiratory disease is much greater than that of atmospheric pollution.

4. Cough, sputum production, or the two combined, are consistently more frequent among cigarette smokers than among non-smokers.

5. Cigarette smoking is associated with a reduction in the efficiency of the lungs. Among males cigarette smokers have a greater prevalence of breathlessness than non-smokers.

6. Cigarette smoking does not appear to cause asthma.

7. Cigarette smokers have a moderately increased risk of death from influenza and pneumonia.

8. Although some people claim there are good effects from smoking, such as relaxation, most authorities agree that those "good effects" do not counter balance a definitely known health hazard.

STATE OF CALIFORNIA NARCOTIC PENALTIES

Narcotics	Adult Conviction	1st Offense		2nd Offense		3rd Offense	
		Years	Minimum	Years	Minimum	Years	Minimum
Heroin	Possession	2-10	2	5-10	5	15-life	15
Opium	Sales or furnishing	5-life	3	10-life	10	15-life	15
Morphine	Adult to minor Minor to minor	10-life 5 minimum	5	10-life 10 minimum	10	15-life	15
Codeine	Sale	1-10					
Dermerol							
Methadone							
Cocaine							
Marijuana							
Marijuana	Cultivating	1-10		2-20		5-life	
(Considered a narcotic under the law)	Possession for sale	2-20		5-15		10-life	
	Sale	5-life	3	5-life	5	10-life	10
	Adult to minor	10-life	5	10-life	10	15-life	15
Peyote	Cultivate/process	1-10		2-20			
	Possession	2-10		5-20	5	15-life	15
	Sale	5-life	2	10-life	5	15-life	15
Prescriptions	Forgery	6 mos.-1		10		10	
Addicts	Using/influence of	3 mos.-1					
	registration	Misdemeanor					

STATE OF CALIFORNIA NARCOTIC PENALTIES

Dangerous Drugs	Adult Conviction	1st Offense Years	2nd Offense Years
LSD, DMT, STP	Possession	$1,000 and/or 1	1-5
Depressants:	Sale (for)	1-3	2-10
Nembutal, Seconal,	Actual sale	1-5	2-10
etc. (barbiturates)	To minor	1-5	2-10
Miltown, Librium			
(tranquilizers)			
Stimulants:			
Benzedrine (Amphetamine)			
Methamphetamine (speed)			

LAWS PERTAINING TO NARCOTICS AND DANGEROUS DRUGS VIOLATIONS

FEDERAL LAWS

1. Harrison Narcotic Act of 1914 - basis of all narcotic laws
2. Import and Export Act of 1922 - this outlaws Heroin
3. Marijuana Tax Act - 1937
4. Boggs Act of 1950 - mandatory sentences for narcotic tax violations
5. Narcotic Control Act - 1956

STATE LAWS

A. Health and Safety Code (Div. 10)

(1) 11500 H & S Code - Possession of Narcotics (Heroin, Morphine, Percodan, Cocaine) (F)

(2) 11500.5 H & S Code - Possession of Narcotics with Intent to Sell (Heroin, Morphine, Percodan, Cocaine) (F)

(3) 11501 H & S Code - Sale of Narcotics (Heroin, Morphine, Percodan, Cocaine) (F)

(4) 11502 H & S Code - Sale of Narcotics to Juvenile (F)

(5) 11503 H & S Code - Offer to Sell Narcotics or Delivers Substance in Lieu of Narcotics (F)

(6) 11530 H & S Code - Possession of Marijuana/Harvesting or Cultivating (F)

(7) 11530.5 H & S Code - Possession of Marijuana with Intent to Sell (F)

(8) 11531 H & S Code - Sale of Marijuana (F)

(9) 11532 H & S Code - Sale of Marijuana to Juvenile (F)

(10) 11540 H & S Code - Possession of Peyote/Harvesting or Cultivating (F)

(11) 11721 H & S Code - Illegal Use or Under the Influence of narcotics (M)

(12) 11555 H & S Code - Illegal Possession of Narcotic Paraphernalia (M)

(13) 11556 H & S Code - Unlawful Presence or Visit Where Narcotics are Used (M)

(14) 11910 H & S Code - Possession of Dangerous Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (M) (Prior F)

(15) 11911 H & S Code - Possession of Dangerous Drugs with Intent to Sell, Amphetamine, Barbiturates, L.S.D., or D.M.T. (F)

(16) 11912 H & S Code - Sale of Dangerous Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (F)

(17) 11913 H & S Code - Sale or Furnishing Juvenile Drugs, Amphetamine, Barbiturates, L.S.D., or D.M.T. (Use of Minor) (F)

B. Business and Professions Code

(1) 4237 B & P Code - Forged/Fictitious/Altered Prescription (first offense (M) - second offense (F)

C. Penal Code

(1) 4573 P.C. - Bringing Narcotics Into County Jail (F)

(2) 4573.5 P.C. - Bringing Dangerous Drugs Into County Jail (F)

(3) 4573.6 P.C. - Possession of Narcotics or Dangerous Drugs in County Jail (F)

D. California Vehicle Code

(1) 12805 C.V.C. - The Department of Motor Vehicles shall not issue or renew a license to a person who is addicted to narcotics or habitually uses drugs.

(2) 13202 C.V.C. - A Court may revoke a driver's license upon conviction of any narcotic offense defined in Division 10 of the Health and Safety Code, starting at Section 11000, when the use of a motor vehicle is involved in the commission of the offense.

(3) 23101 C.V.C. - Any person driving under the influence of intoxicating liquor or combined liquor and any drug, and causes bodily injury is guilty of a felony. May be sentenced to the state prison not less than one year or in the county jail not less than one year.

(4) 23102 C.V.C. - Driving under the influence as above and no bodily harm, a misdemeanor.

(5) 23105 C.V.C. - Unlawful to drive while addicted to the use, or under the influence of narcotic drugs or amphetamine or any derivative thereof. A felony.

(6) 23106 C.V.C. - Unlawful for any person to drive under the influence of any drug, other than a narcotic or amphetamine or any derivative, must render him incapable of safely driving a vehicle. A misdemeanor.

(7) 23108 C.V.C. - Driving under the influence of any dangerous drug other than a narcotic and causes bodily injury. May be sent to state prison not less than one year, nor more than five, or county jail not less than 90 days nor more than one year. A felony.

E. Welfare and Institution Code

(1) 3100 W.I.C. - Voluntary commitment fortreatment of narcotic additic.

(2) 3100.6 W.I.C. - Involuntary commitment o narcotic addicts by health office or peace officer.

F. Harbor-Navigation Code

(1) Section 655 - Motorboat, vessel or on water-skis while under the influence of a narcotic or barbiturate. A. misdemeanor.

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An Interagency Federal Committee was convened in the winter of 1969 under the auspices of the White House to make available to the Nation's schools a variety of State and local curricula for drug education and the prevention of drug abuse. Participating in the Committee chaired by the Office of Education, DHEW, were the Bureau of Narcotics and Dangerous Drugs, Department of Justice; the National Institute of Mental Health, DHEW; and the Office of Economic Opportunity.

As an initial step, the Committee established an Interdisciplinary Panel of non-Government professionals to review some of the drug abuse curricula developed by State and local school systems. Time did not permit a review of all curricula in use throughout the country.

The curricula selected are not recommended for adoption, but are distributed only as resources to assist schools in initiating or improving programs. All schools are encouraged to submit curricula and materials to the National Clearinghouse for Drug Abuse Information. These will be reviewed by the Panel and those selected will be made available to other school systems upon request. Your cooperation will be appreciated.

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INTRODUCTION

The problem of drug abuse is not a new phenomenon. Man's use and abuse of drugs dates back thousands of years. In recent years, however, the dimensions of the problem have reached frightening proportions, raising the specter of societal suicide. Contributors to our current concerns have been the easy accessibility of a myriad of drugs, a tense, stressful social environment, thrill seeking and escapism, among others.

In addressing itself to so complex a problem the discipline of education must go beyond mere dispensing of information and make a stronger effort to effect student attitudinal and behavioral change. The more traditional teaching methods will be inadequate to do the task. This implies the need for broadscale teacher training and retraining in new approaches and techniques. Periodic reinforcement will be needed if the operational style of the classroom is to change. What is required is a long-range view that will aim at the preparation of health educators and other school personnel who can address themselves to this and other serious health problems.

There must also be cooperation and involvement of all other segments of the community in a joint effort with the school if the mounting trend of drug abuse is to be reversed. The closeness of the effort needed is a condition that both the school and the community organizations will find unfamiliar, but melding of community effort is essential if the common objectives are to be met.

The tasks described above will require significant, long-term financial support and commitment. They will also require wise, perceptive leadership from national and state levels. An effective program of broad-based education should produce significant results by the end of the decade.

Interdisciplinary Panel

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AN EDUCATIONAL PROGRAM DEALING WITH DRUG ABUSE

CURRICULUM AND RESOURCE GUIDE

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AN EDUCATIONAL PROGRAM DEALING WITH DRUG ABUSE

CURRICULUM AND RESOURCE GUIDE

DIVISION OF
INSTRUCTIONAL SERVICES

GRACE M. GLYNN
Associate Commissioner

PREPARED BY
PATRICK F. McCARTHY
Consultant, Elementary Education
JOHN W. TROMBI
Consultant, Secondary Education
with the assistance of
LEO J. CONLEY
Coordinator, School Health Services
ADRIENNE R. DOWLING
Instructional Television Coordinator

FOREWORD

Certainly one of the most frightening social and health problems of our day arises from the increasingly widespread experimentation with, and dependency upon, narcotics, stimulants and the like. This is a problem which cuts across socio-economic and generation lines and, quite aside from its grave implications for the welfare of the community as a whole, poses a serious threat to virtually every family in the State.

While there is no gainsaying the validity and desirability of a many-fronted attack on the drug abuse problem, it also appears reasonable to charge our educational agencies with the major responsibility for confronting the problem at its roots. It is readily apparent to anyone who reads the newspaper headlines, which daily assault us with indications of the scope of the problem, that the present need for effective instruction in this area is both clear and urgent.

Some months ago I met with the Attorney General at his request to discuss the need for intensifying educational efforts to deal with this issue. Subsequently he and I discussed the matter with the State Board of Education, which authorized the formation of an advisory committee for the purpose of devising and recommending a "crash program" in this area. The materials presented in this "kit-between-covers" represent the results of this committee's effort, which, because all concerned felt it was urgent to have curricular materials ready for use in the 1969-1970 school year, was crammed into a period of only about seven months.

Some of the materials are intended to provide background to teachers who will be dealing with this subject in their classrooms, and some will be suitable--at least as a starting point--for direct use by the teachers with their students in units of study devoted to narcotics. All the materials, as well as the basic approach recommended, are subject, of course, to testing and further refinement as a result of the teachers' experiences with them and the practical short-range and long-range results they have on our students. At the same time, however, I am confident that this package will be of inestimable and immediate value to the concerned teacher of health, social studies, or science who has been anxious to work in this area with his students but who has been frustrated by a dearth of objective, reliable and convenient materials suitable for use with children or young adults.

A tremendous debt of thanks is owed to the members of the Committee on Drug Abuse. They gave of themselves generously and unstintingly and have performed a great public service. To those members of my own staff in the State Department of Education who worked on this project, and who were responsible for sifting through masses of published and unpublished materials and for doing the time consuming and tedious day-to-day coordinating and development that any "crash effort" of this magnitude entails, I should like to apologize for permitting them to bear the often unreasonable pressures that are concomitant with such projects. They did, I think, an excellent job under the most trying circumstances.

WILLIAM P. ROBINSON, JR.
Commissioner of Education

September, 1969

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INTRODUCTION

The drug and narcotic problem is, to a large extent, one involving youth and young adults ranging in age from early teens to the late twenties. To be of optimum value in combatting the drug and narcotic problem, however, a drug abuse program should have its roots in the elementary grades, preferably beginning in the kindergarten, and be an on-going program through grade twelve.

The youth of today in our drug oriented culture need to be armed with factual information about narcotics and drug abuse. The purpose of this curriculum and resource guide, therefore, is to provide the teachers with a suggested sequential program which will better enable them to inform their students about narcotics and drug abuse, helping the students better understand the consequences of injudicious drug experimentation. Through knowledge the student will be better equipped to make intelligent decisions.

The General Assembly has recognized the need for drug abuse education since existing state law (Title 16, Chapter 22-3 of the General Laws of Rhode Island, 1956 as Amended) provides that "The school committees of the several towns shall make provision for the instruction of the pupils in all schools supported wholly, or in part, by public money, in physiology and hygiene, with special reference to the effects of alcoholic liquors, stimulants and narcotics upon the human system." With the upswing in drug abuse by young people in the state, it has become apparent that greater instructional effort is needed. This curriculum and resource guide has been developed for that purpose.

The curriculum section has been divided into three parts - grades K-3, 4-6, and 7-12. Each part contains concepts and understandings which should be developed by the teacher, some suggested learning experiences which the student should have, and some instructional resources to which the teacher may turn.

The resource section of the guide should provide the teacher and administrator with some of the basic information needed about drug abuse. Appendix B contains the Rhode Island Department of Education's School Health Position Paper - which has been included to point out that health education should be a continuous program grades K-12. Units on narcotics and drug abuse would naturally fit in a total health program.

Papers prepared by members of the advisory committee who had expertise in certain areas related to the drug problem have been included to make this section more relevant to Rhode Island educators. In addition, an effort to provide the student point of view was made by including papers written by three Rhode Island students.

The curriculum guide has been designed for flexibility. Although it is advisable to include the units on narcotics and drug abuse in a health program, the guide on the secondary level could be used in science, social studies, or physical education classes.

Specific placement of concepts in the curriculum has been left to the judgment of the local teachers and administrators. The curriculum guide should provide direction in attaining the objective of a meaningful and informative program on narcotics and drug abuse.

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GENERAL OBJECTIVE

TO PROVIDE PUPILS WITH THE KNOWLEDGE NECESSARY TO MAKE INTELLIGENT DECISIONS FOR THEIR OWN WELL-BEING AND THAT OF SOCIETY IN REGARD TO THE USE OF ADDICTING OR HABITUATING DRUGS AND OTHER HARMFUL SUBSTANCES.

DESIRED OUTCOMES

The intended goals to be achieved through the use of this guide are:

1. To develop proper attitudes concerning narcotics and drug abuse, acquainting the pupils with the social problems and varying social attitudes relating to the use of addicting drugs.
2. To teach that illegal traffic in narcotics, drug abuse, and drug addiction are related to crime and delinquency.
3. To develop an understanding and appreciation for the value of narcotics to man making clear that there are legitimate medical uses for narcotic drugs.
4. To develop an understanding of laws (state and federal) and law enforcement as they relate to narcotics and drug abuse.
5. To develop an understanding of the dangers associated with narcotics and drug abuse--the addicting nature of narcotic drugs and the habituating nature of some other substances.
6. To develop an understanding that mental and physical health can be attained and maintained only through one's own efforts rather than through improper use of drugs and narcotics and emphasizing ways of dealing with tensions that exclude the use of drugs.
7. To develop pupil, parent, and community interest in helping to solve the problem of narcotics and drug abuse.
8. To familiarize pupils with the significant historical data relative to narcotics and drug abuse.
9. To teach a clear and accurate vocabulary with definitions of terms and phrases related to the problem of drug abuse.
10. To develop pupil understanding of the chemical nature and the physiological effects of narcotic drugs and other harmful substances.

11. To acquaint pupils with the available facilities and the methods used for the treatment of narcotic addicts.

12. To develop an understanding of how drug use relates to safety.

13. To deter student involvement in narcotics and drug abuse.

SUGGESTED PRESENTATION

1. Use in a sequential health education program

   or

2. In other subject areas for example - science, biology, social studies, physical education, etc.

   or

3. Intersperse concepts into several subject areas.

4. Use resource people as an adjunct to the classroom teacher.

5. Be factual - "tell it like it is".

6. Be current - keep up with latest information from periodicals and newspapers.

7. Be a catalyst - get students working and involved (avoid teacher lecture method).

8. Be prepared - plan each lesson (know your material).

9. Use varied techniques of presentation e.g., brainstorming, buzz session, case study demonstration, discussion, group procedure, incident process, lecture, panel, symposium, problem solving, question-answer, role playing, and special report.

SOME KEY CONCEPTS AND UNDERSTANDINGS FOR GRADES K-3

In the construction of any curriculum guide the objective is to develop a sequential organization of learning experiences - one experience built upon another until a unified structure, founded on essential elements or understandings, is completed.

So it is with this curriculum guide directed toward the prevention of drug abuse. Though the "Thou Shalt Nots," are to be found herein the emphasis of motivation, rather than on the negative, will be found to be on the positive. It is essential that younger children understand that medicines and drugs have been developed for the improvement of the human condition not for its destruction, that these medicines and drugs are, for the most part, utilized against those agents which are inimical to health.

At the K-3 level, it is necessary that the child begin to have an understanding of medicines and drugs - what they are, how they may be safely used, against those agents they are directed, how these agents are spread to the body, that a clean and healthy body can more easily combat such agents.

We hope that this orderly flow of learning activities will so affect the youngster that positive understandings and attitudes developed in early life will carry over into his later school years and so influence his awareness and behavior, that he will avoid the promiscuous use of drugs and narcotics.

CONCEPT ONE: FOODS ARE SUBSTANCES WHICH NOURISH THE BODY AND WHICH THE BODY MUST HAVE TO STAY HEALTHY.

MICRO CONCEPTS AND UNDERSTANDINGS

a. Foods necessary to maintain health are sometimes placed in a category called The Basic Four.

b. Basic Four foods include milk, meat and eggs, fruits and vegetables, bread and cereals.

c. Milk should be pasteurized before being consumed.

d. Fresh fruits and vegetables should be cleaned before being consumed

SOME SUGGESTED LEARNING EXPERIENCES

a. Sketch, color, cut out and display foods common to each of the basic four food groups.

b. Discuss the value of such foods as potato chips, candy, popcorn, coke, etc.

c. Discuss the importance of eating three good meals each day.

d. Have children keep individual, weekly height and weight charts and periodically compare changes.

SOME INSTRUCTIONAL RESOURCES

a. "Every Day Eat the 1-2-3-4 Way," "Uncle Jim's Daily Farm," "Where We Get Our Food," "Your Health," "Growing Up," National Dairy Council.

b. Grout, Ruth E., Health Teaching in Schools, W. B. Saunders Co., Philadelphia, 1968.

CONCEPT TWO: POISONS ARE SUBSTANCES WHICH ARE HARMFUL TO LIFE.

MICRO CONCEPTS AND UNDERSTANDINGS

a. Poisons in the home are often found in kitchen, bathroom, cellar, garage, closets and other storage areas.

b. Poisons should be well labeled and placed high from the floor out of the reach of small children.

c. Medicines or drugs can have poisonous effects.

d. The effect of poisons may vary from one person to another.

SOME SUGGESTED LEARNING EXPERIENCES

a. Develop a checklist of poisonous substances found in the home.

b. Sketch, color, cut out and display common safety signs.

c. List effects too much medicine can produce.

d. Nourish inexpensive, health plant with salt water.

SOME INSTRUCTIONAL RESOURCES

a. Anderson, E. L., Health Principles and Practices.

b. "Dennis the Menace Takes a Poke at Poison," United States Public Health Service.

CONCEPT THREE: POISONOUS REACTIONS MAY COME AS A RESULT OF CONTACT OR USE OF CERTAIN PLANTS.

MICRO CONCEPTS AND UNDERSTANDINGS

a. Some Rhode Island plants causing such reactions are: poison ivy, poison oak, poison sumac, marijuana, pokeweed.

b. Many of these plants have certain danger signs - for instance the design, layout, color, and texture of poison ivy leaves.

c. Parts of the body which have come in contact with poison ivy, poison oak or poison sumac should be thoroughly washed with a strong soap.

d. Plant berries should not be eaten unless such berries are known to be good to eat.

SOME SUGGESTED LEARNING EXPERIENCES

a. Sketch, color, cut out and display reproductions of common poisonous plants.

b. List effects of different poisonous plants.

c. Illustrate, via an overhead projector, those poisonous plants common to Rhode Island.

SOME INSTRUCTIONAL RESOURCES

a. Common Poisonous Plants of New England, Public Health Service Publication No. 1220, U. S. Government Printing Office, Washington, D. C., 1964

b. Personal and Community Health, Turner, C. E., Mosby Co., St. Louis, 1967.

c. Poison Ivy, U. S. Public Health Service.

CONCEPT FOUR: MEDICINES AND DRUGS ARE SUBSTANCES USED IN TREATING INJURIES AND DISEASES.

MICRO CONCEPTS AND UNDERSTANDINGS

a. Only legal medicines and drugs may be used and these only under proper supervision.

b. Medicines and drugs take many forms among which are: solids, liquids (including drops, sprays and mists), gases, powders, and ointments.

c. Medicines have been developed for different sexes, different diseases, different age groups and different forms of animal and vegetable life.

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d. Medicines help people to both retain health and regain health.

e. Medicines come from both natural and man-made sources.

f. Children should be taught neither to talk with strangers nor to accept gifts, candy, pills or rides from them.

SOME SUGGESTED LEARNING EXPERIENCES

a. Discuss the federal Food and Drug Administration regulations which apply to medicine.

b. Distinguish between over-the-counter drugs and prescription drugs.

c. Discuss effects of pesticides on man, fish, insects, environment.

d. Develop a display board showing the forms in which various medicines are manufactured.

SOME INSTRUCTIONAL RESOURCES

a. Irwin Leslie, Wesley Stanton and Edward Williams, Health for Better Living, C. E. Merrill Books, Inc., Columbus, Ohio, 1964.

b. Today's Health Guide, American Medical Association.

CONCEPT FIVE: MEDICINES SHOULD BE USED WITH CAUTION.

MICRO CONCEPTS AND UNDERSTANDINGS

a. Medicines should be kept in a locked medicine chest.

b. Whenever possible, medicine bottles should have safety caps.

c. Medicine bottles should be well labeled.

d. Medicines should only be used in the amount and at the time prescribed.

e. Misuse of medicines and narcotics can have harmful effects on the body.

f. Pills or other small objects should not be put in ears or nose.

SOME SUGGESTED LEARNING EXPERIENCES

a. Develop a checklist of medicines commonly found in the home.

b. Sketch, color, cut out and display common safety signs.

c. Invite the school doctor to visit the class to discuss the positive an
negative effects of common household medicines.

d. Ask the children to discuss among themselves the effects of medicines they have taken.

e. Discuss medical folklore.

SOME INSTRUCTIONAL RESOURCES

a. Anderson, C. L., Community Health, Mosby Co., St. Louis, 1967.

b. Irwin, L. W., Staton and Edward Williams, Health for Better Living, C. E. Merrill Books, Inc., Columbus, Ohio, 1964.

c. Today's Health Guide, American Medical Association.

d. What's In Your Medicine Chest? Metropolitan Life.

SOME KEY CONCEPTS AND UNDERSTANDINGS FOR GRADES 4-6

Health instruction in the middle grades should reinforce and expand upon instruction given in the primary grades. The educational objective of a drugs and narcotics program is the same at all grade levels: to prevent the development of an actual drug abuse situation.

The elementary grades offer the first opportunity to present formal instruction concerning the principles of good health practices. The subject of drugs: what they are, what their benefits are and how they should be used can be taught in the elementary grades.

The concepts that follow are recommended for use in the middle grades. They are intended to help pupils acquire knowledge, develop attitudes, and employ practices that will be beneficial to their health and well being and that will make them resistant to the use of any harmful substances.

CONCEPT ONE: DRUGS HAVE BEEN USED BY MAN FOR THOUSANDS OF YEARS.

MICRO CONCEPTS AND UNDERSTANDINGS

a. The early use of drugs was associated with magic.

b. Opium has been known since prehistoric times.

c. Ancient cultures developed pain relieving drugs from plants.

d. While sleep producing drugs (anesthetics) were known to man since 400 B.C. they were not used for surgery until the nineteenth century.

e. A number of drugs in use today were discovered and used by primitive people, e.g., curare was used by natives who placed the drug on the tips of their darts and arrows to paralyze the game they hunted.

f. Primitive people also used drugs to induce states of intoxication during religious rites.

g. Even in earliest time, man was concerned with the use of drugs.

h. Many of the early medicines had no effect on the ailments they were used for. People using them felt better because they thought they were being helped.

i. Our forefathers learned about drugs through experience. Some drugs proved to be poisonous, some helpful, and others produced lifelong addiction.

j. The injection of narcotics through the skin by needle as a quick way to relieve pain was first widely used during the Civil War.

k. Drug control laws have come about to protect society from the misuse of potentially dangerous substance.

SOME SUGGESTED LEARNING EXPERIENCES

a. Select committees to do research on the history of drugs. The research might include such specifics as the following:

  1) Man's early search in the world of nature for substances to relieve his ills.

  2) Drugs derived directly from natural sources and still in use today.

  3) The development of synthetic drugs and their importance in medicine today.

  4) The growth of the drug industry in recent years.

b. Organize a committee and give it the responsibility of informing the class of some of the drug-promotional efforts that are carried on in the modern world. The committee might, for instance do the following:

  1) Make a bulletin-board display of drug advertisements.

  2) Make a tape recording, if possible, of drug commercials on television and radio and play the recording to the class.

  3) Discuss the meanings of various slogans that are used in advertising drugs and tell how some of this slogan information gives wrong ideas.

c. Discuss local, state and federal laws concerning the manufacturing and sale of drugs and narcotics.

d. What means do we now use to test drugs before they are used by people?

SOME INSTRUCTIONAL RESOURCES

a. Drug Abuse: Escape to Nowhere, (A Guide for Educators) Smith, Kline and French Laboratories, Philadelphia, 1968, pp. 15-25.

b. Houser, Norman W., Drugs, Facts on Their Use and Abuse, Scott, Foresman and Company, Glenview, Illinois, 1969, pp. 37-39.

c. Vogel, Victor H., and Virginia E. Vogel, Facts About Narcotics and Other Dangerous Drugs, Science Research Associates, Inc., Chicago, 1967, pp. 5-10.

CONCEPT TWO: DRUGS SHOULD BE USED WITH CAUTION.

MICRO CONCEPTS AND UNDERSTANDINGS

a. Prescription drugs can only be legally purchased with a doctor's prescription.

b. Nonprescription drugs may be bought without a doctor's prescription.

c. Drugs are chemical substances which can be harmful if not properly used.

d. The directions given by the doctor for the use of prescription drugs should be followed carefully.

e. A drug secured by prescription should be used only by the person for whom the prescription was written.

f. Reading the labels of over-the-counter drugs is important so one may be guided in their proper use and possible dangers.

g. Prescribed amounts of medicine may be helpful. Overdoses can be harmful while underdoses can render the medication ineffective.

h. Some medicines must be refrigerated to prevent spoilage.

i. Old medicines in the medicine chest should be flushed down the toilet.

j. Medicines should be kept out of the reach of young children.

k. Parents or adults must supervise their children's use of all drugs including the use of aspirin, vitamins, and external antiseptics.

l. Drugs should be accepted only from responsible adults; physicians, dentists, parents, relatives.

SOME SUGGESTED LEARNING EXPERIENCES

a. Discuss why a doctor's prescription is necessary to obtain certain types of drugs.

b. Who are some of the people called "doctor" but are not medical doctors and, therefore, cannot prescribe drugs?

c. Discuss what information a person should have before taking any medicines. For example: frequency of doses; best time to take the medicine; amount of medicine to take; and importance of informing the physician of the effects of medicine.

d. Discuss the need to report to parents or teachers any strange feeling following the ingestion of any substance.

e. Explain to the class the difference between drugs and medicines that are sold "across the counter" and those that are sold by medical prescription only.

f. Have the pupils draw up some tentative suggestions as to the proper handlin of medicines and medications which are kept in their homes. A typical list might include such procedures as the following:

   1) Keep all medical supplies in a safe location, particularly in a place that is out of reach of very young children.

   2) Determine whether the place chosen for the storage and safekeeping of family medicines is satisfactory from the standpoint of temperature, humidity, cleanliness, and the like.

   3) Decide on the most feasible ways of discarding or disposing of pills and other medications that have lost their effectiveness.

   When the pupils have done this, have them review their lists of suggestions with their parents and report the results to the class.

g. Inspect with the class the labels of a number of nonprescription drugs for directions in their use and possible side effects.

SOME INSTRUCTIONAL RESOURCES

a. Drug Abuse: Escape to Nowhere (A Guide to Educators), Smith Kline and French Laboratories, Philadelphia, 1968, pp. 77-78.

b. Drugs and Your Body, U. S. Department of Health, Education, and Welfare, FDA Publication No. 52, pp. 2-7.

c. Houser, Norman W., Drugs, Facts on Their Use and Abuse, Scott, Foresman and Company, Glenview, Illinois, 1969, pp. 5-7.

CONCEPT THREE: DRUGS, WHEN PROPERLY USED, ARE OF VALUE TO MANKIND.

MICRO CONCEPTS AND UNDERSTANDINGS

a. Drugs and medicines have contributed to making our society healthier.

b. Our life expectancy has been increased because of drugs and drug research.

c. Drugs play an important role in the control of disease and pain.

d. Drugs have made surgery safer and painless.

e. Drugs play an important role in painless dentistry and childbirth.

f. Some diseases do not occur as frequently because drugs can prevent them or overcome them before they can spread to others.

g. People tolerate the ravages of disease better because of pain relieving and mood modifying drugs.

h. Every substance taken into the body by any means (eating, sniffing, injection, or smoking) enters into the complex functioning of the body and affects its condition.

SOME SUGGESTED LEARNING EXPERIENCES

a. Discuss some of the benefits of drugs: control of diabetes, the prevention of smallpox, diptheria, poliomyelitis, measles and infection.

b. Compare incidence of bacteriallv caused communicable diseases in 1900 and the present.

c. What kinds of health problems are prevalent in more primitive societies where helpful drugs are not available to control disease?

d. Prepare graphs showing increase life expectancy in United States and other countries.

e. Have pupils prepare reports on the lives of famous health scientists who discovered life saving drugs.

f. Have pupils make drawings of plants from which life saving drugs are derived.

g. Stimulate the class to discuss the importance of sound health and the responsibility that every individual has for maintaining and safeguarding his health.

h. Select a committee of pupils to prepare a diagram of the bloodstream, showing how substances entering the body by any means are carried throughout the body.

SOME INSTRUCTIONAL RESOURCES

a. Drugs and Your Body, U. S. Department of Health, Education, and Welfare, FDA Publications No. 52.

b. Drugs: Helpful and Harmful (Filmstrip and 12½ minute record), Henk Newenhouse, Inc., Northfield, Illinois (Available from R. I. Audio-Visual Library)

c. Irwin, Leslie W., Wesley M. Staton and Edward K. Williams, Health for Better Living, Charles E. Merrill Books, Inc., Columbus, Ohio, 1964, pp. 181-187

CONCEPT FOUR: DRUGS AND VOLATILE CHEMICALS, WHEN IMPROPERLY USED, ARE POTENTIALLY DANGEROUS.

MICRO CONCEPTS AND UNDERSTANDINGS

a. Drugs, narcotics and volatile chemicals affect the central nervous system, and, therefore, the behavior of the people who take them.

b. Marijuana, sleeping pills, pep pills and tranquilizers are the most commonly abused drugs.

c. Improperly used, drugs can damage the individual and interfere with his success in life.

Note to Teacher:

Substances with abuse potential range from simple kitchen spices through common flowers and weeds to highly sophisticated drugs. All these substances may be divided into five categories: 1) narcotics; 2) sedatives; 3) tranquilizers; 4) stimulants; and 5) hallucinogens. If a teacher or administrator feels there is a need for an in-depth study of these substances, refer to Concept 5 in the secondary section of this guide.

d. Poisonous plants should be avoided.

e. The abuse of volatile materials such as gasoline and glue can cause damage to human tissue.

f. The inhalation of solvent fumes from glue, gasoline, paint thinner and lighter fluid will produce a form of intoxication.

g. Glue sniffing can cause permanent brain damage.

Note to Teacher:

Inhalation is practiced most frequently by youngsters between 10 and 15 years of age. Glue usually is squeezed into a handkerchief or bag which is placed over the nose and mouth. Gasoline and paint thinner fumes may be inhaled directly from tanks and cans.

Glue sniffing may become less of a problem in the future. Testor Corporation, a leading manufacturer of quick drying plastic glue for hobbyists, has added mustard oil to its product to make it obnoxious to sniffers. The oil, the company says, wallops the nasal area with the impact of a mouthful of mustard or horseradish.

SOME SUGGESTED LEARNING EXPERIENCES

a. Have the pupils ask their parents what substances in their homes may be potentially harmful to the human body, such as detergents, insect poisons, volatile chemicals, lye and pills. Then discuss with the class certain means whereby younger children may be protected from hazardous experimentation with the substances reported.

b. Display an exhibit of dangerous household substances - including those containing volatile chemicals - and describe their uses to the class. Discuss with the pupils various means of protecting oneself and others from bodily damage that can be inflected either by inhaling the fumes of certain of these substances or by touching or swallowing them.

c. Appoint a committee to do research on poisonous plants. Have the pupils make a list of poisonous plants that grow in Rhode Island and write a description of each plant. Discuss the precautions that should be taken in protecting oneself and others from poisonous plants and the possible injurious effects that can result from coming into contact with them.

d. Have pupils list what is found around the home that can be identified as a volatile chemical.

e. Discuss the effects of glue sniffing on a person's health.

f. Read warning from labels on empty paint cans, cleaning fluids, glue tubes, etc., and explain meaning to pupils.

g. Explain to the pupils what they should do if they feel any unusual effect after having been around one of these substances.

h. Describe some of the physical and psychological effects of improperly using drugs and volatile substances - both immediate and long range.

i. Have pupils make posters warning about drug abuse.

j. Role play a situation in which a student is urged by his friends to take a dare and ingest an unknown substance.

SOME INSTRUCTIONAL RESOURCES

a. Common Poisonous Plants of New England, Public Health Service Publication No. 1220, U. S. Government Printing Office, Washington, D. C., 1964.

b. Drug Abuse: Escape to Nowhere (A Guide to Educators), Smith Kline and French Laboratories, Philadelphia, 1968, pp. 27-43.

c. Drug Abuse: The Chemical Cop-Out, Booklet Prepared and Distributed by National Association of Blue Shield Plans, 1969.

d. Drugs and Your Body, U. S. Department of Health, Education, and Welfare, FDA Publication No. 52.

e. Drugs: Helpful and Harmful (Filmstrip and 12½ minute record), Henk Newenhouse, Inc., Northfield. Illinois (Available from the R. I. Audio-Visual Library)

f. Houser, Norman W., Drugs, Facts on Their Use and Abuse, Scott, Foresman and Company, Glenview, Illinois, 1969, pp. 7-35.

g. Vogel, Victor H. and Virginia E. Vogel, Facts About Narcotics and Other Dangerous Drugs, Science Research Associates, Inc., Chicago, 1967, pp. 11-31.

h. Winick, Charles and Jacob Goldstein, The Glue Sniffing Problem, Greenwich Health Association, Greenwich, Connecticut.

SOME KEY CONCEPTS AND UNDERSTANDINGS FOR GRADES 7-12

Health education should be a continuous program from grade K through 12, with units on narcotics and drug abuse as part of that program. However, should a health program not be included in the secondary curriculum of a school, a continuous narcotic and drug abuse program should be implemented with the units being included in other subject areas such as social studies, science, or physical education.

In-depth study of the drug problem is presented in the conceptual outline. The key concepts and understandings are intended as points of knowledge for pupils that will develop attitudes and arm with information that will help him to make value judgments and worthwhile decisions.

CONCEPT ONE: THE PUBLIC IS PROTECTED FROM DRUGS WITH ADVERSE EFFECTS OR SIDE EFFECTS THROUGH THE PROCESS OF RESEARCH, TESTING AND CONTINUING QUALITY CONTROL.

MIRCO CONCEPTS AND UNDERSTANDINGS:

a. The Pure Food and Drug Administration controls the drug products that are marketed.

b. Drug company plants are inspected.

c. Narcotic production and sales are controlled.

d. Drug companies experiment to develop new products.

e. New products are extensively researched and tested before being sold on the market.

f. Doctors are informed about possible side effects that may result from specific drugs.

g. The consumer should examine critically the advertising about patent medicines.

h. There are dangers that exist in taking drugs.

SOME SUGGESTED LEARNING EXPERIENCES

a. Collect news clippings related to the micro concepts. Have student reports on the news items.

b. Have students research the micro concepts in the periodicals and report in class.

c. Have group discussions on the micro concepts.

d. Invite a druggist or representative of a drug firm to speak to the class.

e. Have students prepare a bulletin board of patent medicine advertising.

SOME SUGGESTED TEACHING TECHNIQUES:

a. Group discussion

b. Guest lecturer

c. Special report

SOME INSTRUCTIONAL RESOURCES:

a. Gallagher, J. Hoswell, M.D., J. H. Goldberger, M.D., and Grace T. Hallock, Health for Life, Ginn and Company, Boston, New York and Chicago, 1961, pp. 460-463.

b. Houser, Norman W. In consultation with Julius B. Richmond, M.D., Drugs: Facts on Their Use and Misuse, Scott, Foresman and Company, 1969, pp. 5-8.

c. Irwin, Leslie W., Ph.D., Wesley M. Staton, Ed.D., and Edward K. Williams, M.D., Health For Better Living, Charles E. Merrill Books, Inc., Columbus, Ohio, 1964, pp. 268-271.

d. Lawrence, Thomas Gordon, M.A., Alice Schriver, Ed.M., Douglas F. Powers, M.D., Louis J. Vorhaus, M.D., Your Health and Safety, Harcourt, Brace and World, Inc., New York and Chicago, 1969, pp. 542-544.

e. Otto, James H., Cloyd J. Julian, and J. Edward Tether, Modern Health, Holt, Rinehart and Winston, Inc., New York, Toronto, London, 1967, pp. 471-472.

f. Schifferes, Justus J., Ph.D., Healthier Living, John Wiley and Sons, Inc., New York, 1967, pp. 380-388.

CONCEPT TWO: PROPERLY USED, DRUGS ARE OF VALUE TO MANKIND.

MICRO CONCEPTS AND UNDERSTANDINGS:

a. The human body is very complex with chemical functions that are very complicated and sensitive.

b. Two kinds of drugs are available in America-"over the counter" drugs and prescription drugs.

c. If not used properly both "over the counter" and prescription drugs can be dangerous.

d. There have been beneficial drugs developed for all parts and systems of the human body--the skeletal system, muscular system, the skin, circulatory system, respiratory system, digestive system, nervous system, endocrine glands, urinary system and the eye and ear.

e. Drugs are available for the relief of pain.

f. Drugs can help cure diseases.

g. Drugs have other medical uses.

h. Drugs have increased the life expectancy of man.

i. Drugs need to be used as medically directed.

j. Drugs affect different individuals in different ways.

k. Narcotics have been a blessing and a curse to mankind.

SOME SUGGESTED LEARNING EXPERIENCES:

a. Have students research in the periodical literature the value of drugs.

b. Invite a medical doctor to speak to the class on the value of drugs and the importance of using drugs as medically directed.

c. Have students investigate the rise in life expectancy of man in the U.S., correlate this with the advances in medicine.*

d. Have students graph the rise of life expectancy of man in the U.S.

e. Have students investigate and report in class on the unexpected reactions to drugs and what to do when reactions occur, e.g., aspirin, tranquilizers, penicillin, stimulants.

f. Have students investigate and report in class on the hazards and precautions necessary when taking drugs, e.g., overdose, combining drugs without the doctor's knowledge, sharing drugs.

g. Have students investigate the dangers associated with the various types of drugs: narcotics, patent medicines, anaesthetics, antibiotics, hormones, tranquilizers, antihistamines, energizers, barbiturates, antiseptics and hallucinogens. Investigation may take the form of researching the literature, interviewing druggists, collecting and analysing advertisements, and material supplied by drug companies.

h. Have students investigate the uses of the most common narcotic drugs and report back to class.

i. Have students investigate the harm that can result to the narcotic abuser.

*Illustrate through tracing drug research and showing its influence on life expectancy of individuals with diabetes, epilepsy, heart disease, tuberculosis, ostiomyolitis, rheumatic fever, malaria, and yellow fever.

SOME SUGGESTED TEACHING TECHNIQUES:

a. Special Student Report

b. Guest Lecturer

c. Panel Discussion

d. Question-answer

Since this unit could cover several days, a combination of teaching techniques would be in order.

Vocabulary:

addiction
central nervous system
delirium
depressant
drug dependence
habituation
hallucinogen
hypnotic
narcotic
potentiation
physical dependence
psychosis
sedative
side effects
stimulant
tolerance
toxic effects (poisoning)

SOME INSTRUCTIONAL MATERIAL:

a. Compton's Encyclopedia and Fact--Index, F.E. Compton Co., Division of Encyclopedia Britannica, Inc., William Benton, Publisher, Chicago, Vol. 6, 1969, pp. 200, 200a and 200b.

b. F.D.A. Publication No. 52, Drugs and Your Body, Educational Services Staff, Food and Drug Administration Consumer Protection and Environmental Health Service, U.S. Department of Health, Education and Welfare.

c. Irwin, Leslie, W., Ph.D., Wesley M. Staton, Ed.D., and Edward K. Williams, M.D., Health for Better Living, Charles E. Merrill Books, Inc., Columbus Ohio, 1964, pp. 181-187.

CONCEPT THREE: PATHS TO DRUG ABUSE VARY.

MICRO CONCEPTS AND UNDERSTANDINGS:

a. Certain personalities are more susceptible to addiction.

b. Some people seek excitement and adventure in drugs--desire a new experience.

c. Some people seek to escape personal problems through drugs.

d. Some drug abuse is a manifestation of today's "youth rebellion" against parents and/or society.

e. Some weaker personalities succumb to peer pressure to be a part of the "gang".

f. Some people turn to drugs out of curiosity.

g. Some people seek increased artistic creativity through drugs.

h. Some people accidentally become drug abusers.

SOME SUGGESTED LEARNING EXPERIENCES:

a. Have students research in the periodical literature the various paths to drug abuse.

b. Have students build a newspaper clipping file for the bulletin board related to "Paths to Drug Abuse".

c. Invite a representative from probation and parole, a representative from law enforcement or a representative from Marathon House to talk to the class on "Paths to Drug Abuse Vary".

d. Have students investigate the reasons why other students try glue sniffing and marijuana.

e. Develop the idea of other outlets for teenage energy, curiosity, and "hang-ups" which eliminate the need to try drugs and/or volatile chemicals which present hazards.

SOME SUGGESTED TEACHING TECHNIQUES:

a. Case Study

b. Buzz session

c. Guest lecturer

d. Role playing

Vocabulary:

personality disorders
establishment
society
culture
self discipline

social control
social growth
self reliance
self identification
individuality

SOME INSTRUCTIONAL RESOURCES:

a. Drug Abuse: The Chemical Cop-Out, National Association of Blue Shield

Plans, April, 1969, (Information on the concepts are interspersed throughout the booklet.)

b. Bloomquist, Edward R., M.D., Marijuana, Glencoe Press, A division of the Macmillan Company, Beverly Hills, 1968, pp. 107-127.

c. Vogel, Victor H., M.D. and Virginia E. Vogel, Facts About Narcotics and Other Dangerous Drugs, Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois 60611, 1967, pp. 35-41.

d. Wakefield, Dan (editor), The Addict, Fawcett Publications, Inc., Greenwich Conn., 1963. "The Addict Psychology", Dr. Charles Winick, pp. 47-53.

CONCEPT FOUR: THE HISTORICAL DEVELOPMENT OF DRUG ABUSE DATES FROM ANTIQUITY.

MICRO CONCEPTS AND UNDERSTANDINGS:

a. As far back as 2700 B.C. marijuana was known to the Chinese.

b. In 500 B.C. the Scythians were reported using marijuana.

c. Opium was known to the Egyptians as far back as 1500 B.C.

d. By the 18th century, opium was known and used in the American colonies.

e. In the latter part of the 18th century, opium was recommended as a pain reliever and for medicinal purposes.

f. Opium's addictive liability was not understood by the 18th century medical profession.

g. Problems of opium addiction were compounded with the discovery of morphine (1805) and codeine (1832).

h. Invention of the hypodermic needle influenced the spread of narcotic addiction (1843).

i. Many soldiers in the Civil War became addicted to Morphine.

j. Several forms of opium and its derivatives were in use in the Post Civil War Period.

k. Heroin was synthesized in 1898.

l. Before the time the Spaniards arrived in Mexico, the Indians were using a triad of plants-teonanacatl, ololiuqui, and peyote-for mind altering.

m. The hallucinogenic alkaloid mescaline was isolated from peyote in 1896.

n. In the 1950's the hallucinogenic alkaloid psyilocybin was isolated from the teonanacatl mushroom.

o. The mind altering properties of LSD were observed for the first time in 1938.

p. Early drug abuse was caused by a lack of medical knowledge about the addictive quality of drugs and the lack of laws governing drug control.

q. Incidence of drug abuse has risen in the 20th century.

SOME SUGGESTED LEARNING EXPERIENCES:

a. Have students research the micro concepts in the resource literature.

b. Have oral reports prepared by the students on the micro concepts.

c. Encourage student discussion of the micro concepts.

d. Have students develop a time line illustrating the use of drugs.

SOME SUGGESTED TEACHING TECHNIQUES:

a. Discussion

b. Group procedure (group work)

c. Quiz Game (prepared by students)

Vocabulary:

opium
marijuana
morphine
"Soldier's Illness"
hypodermic syringe
laudanum
paregoric
heroin
synthesized
mescaline
peyote
LSD

SOME INSTRUCTIONAL RESOURCES:

a. Cashman, John, The LSD Story, Fawcett Publications, Inc., Greenwich, Conn., 1966, pp. 14-28.

b. Drug Abuse: Escape to Nowhere. Smith Kline and French Laboratories, Philadelphia, in cooperation with the American Association for Health, Physical Education and Recreation, a department of the National Education Association, 1967, pp. 15-25.

c. Vogel, Victor H., M.D. and Virginia E. Vogel, Facts About Narcotics and Other Dangerous Drugs, Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois 60611, 1967, pp. 5-10.

CONCEPT FIVE: DRUGS OF ABUSE ALTER THE NORMAL HUMAN SYSTEM.

MICRO CONCEPTS AND UNDERSTANDINGS:

a. Substances with the potential for abuse range from simple kitchen spices through certain flowers and weeds to sophisticated scientifically prepared drugs and common solvents.

b. Today's drug depdendent can be found in all socio-economic classes in the major cities and with increasing frequency in smaller cities and towns.

c. Drugs of abuse are sought for their mind-altering effects.

d. Marijuana is a controversial drug of abuse.

   1. There is ignorance and misunderstanding about the effects of marijuana.

   2. Irrelevant comparisons of marijuana to alcohol, nicotine and heroin have been made.

   3. Some people seek to justify or rationalize their involvement with marijuana or other drugs.

   4. Some people seek to exploit the drug cult for purposes of notoriety, publicity, protest, or profit.

   5. Marijuana is recognized universally as a mind altering drug.

   6. In the United States marijuana is used by drug abusers for the explicit purpose of inducing a state of drug intoxication.

   7. In varying degrees a state of marijuana intoxication can cause a decrease of psychomotor coordination and distort the ability to perceive time and distance.

   8. Habitual marijuana use is frequently associated with people who have marginal personalities exhibiting feelings of inadequacy, anxiety, disaffiliation, alienation and frustration or those who are actually neurotic or psychotic or suffer from other mental disorders.

   9. A possible danger in marijuana use lies in its tendency to deaden the users perception of reality and impair his judgment and inhibitions aggravating or exaggerating pre-existing mental state or disposition.

   10. In America marijuana has no accepted medical use.

   11. No recognized Western religion includes as part of its dogma marijuana.

12. Marijuana use among young adults and teenagers has been growing.

13. The use, possession and sale of marijuana in America is illegal and has been outlawed in most other civilized countries.

14. All marijuana that is available on the illicit American drug market is either produced illegally here or smuggled into the country.

15. When trying marijuana for the first time people are likely to think they are unaffected by it. They may feel no drug intoxication getting no "kicks" from the drug.

16. Most marijuana users have been taught to use the drug, learning to experience mild intoxication, distortions of the senses and illusions through advice and encouragement of other users.

17. The effects of marijuana are unpredictable because of the variation in purity of the product on the illicit drug market and the variance in the physical and mental state of the users. The purity of the product can vary from the whole cannabis plant ground up and adulterated with other harmless plants to the ground tops or the pure resin in hashish. It can be said, then, that the user's response to the drug is dependent on three factors--variance in purity of the product and his physical and psychological state at the time of use.

18. Used with regularity, marijuana can be habit forming but will not cause physical addiction.

19. The habitual marijuana user risks emotional upsets due to the drug's strange effects, may experience undesirable behavior through drug intoxication, may become involved in hazardous activities that may lead to accidents, and always the user risks arrest and punishment for violation of the drug laws banning marijuana.

20. Although the present "street marijuana" is relatively weak, the heavy user of marijuana risks social degeneration and mental illness as has been seen in other countries through observation and studies. It is recognized, however, that in these countries stronger forms of cannabis is available.

21. Essentially, marijuana is used for its mind altering properties. Some people, however, have used it as a form of protest against society or parental authority. Some, on the other hand, have experimented with cannabis out of curiosity or social pressure.

22. The decision to use or not use marijuana is up to the individual. When faced with the decision, individuals should consider all the ramifications of cannabis use.

23. Regardless of what opinion an individual may hold relative to the laws governing possession, sale, or use of marijuana, the laws still stand and if broken will result in severe penalties.

24. Violation of marijuana laws may result in arrest with possible imprisonment. The resulting record will remain with the individual for life.

LSD and several other of the psychedelic drugs have been used by the drug abusers in their quest for instant paradise.

1. Drugs that can cause illusions or hallucinations are called "hallucinogens" or "psychedelics."

2. LSD heads the list of commonly abused hallucinogens. Others in the list of commonly abused hallucinogens are peyote (mescaline), psilocybin, STP, and DMT.

3. Peyote is the dried button of the peyote or dumpling cactus that grows in the desert areas of southwestern United States and Mexico. Ingestion of the drug produces colorful hallucinations believed by some abusers to be mystical visions.

4. The hallucinogenic drugs can produce uncontrollable violence, extreme panic, suicide or homocide. Among the unstable or those with pre-existing neurosis or psychosis, use of these drugs can result in severe mental illness requiring long stays in mental hospitals.

5. Mescaline is a concentrated form of peyote.

6. Like all of the so-called mind expanding or hallucinogenic drugs, mescaline and peyote have the power to change human behavior radically, often in a dangerous manner.

7. Psilocybin, a drug similar to LSD, is prepared from a certain variety of Mexican mushroom.

8. The drug psilocybin is said to produce brilliant visual hallucinations generally followed by a period of emotional disturbance.

9. DMT, or dimethyltryptamine is a non-addicting psychedelic drug similar to LSD, whose normal dose, 50 to 60 milligrams, will produce effects in the user that will last about half an hour.

10. STP, another of the hallucinogens, has the technical name 4-methyl-2, 5 dimethoxy alpha methyl phenethylamine. The letters STP according to users stands for Serenity, Tranquility, and Peace.

11. Since little research has been done with the powerful psychedelic STP, a prudent person would avoid its use. The full effects of the substance still have not been determined.

12. LSD or lysergic acid diethylamide is the most potent of the psychedelic deugs. The normal dose of 100 to 300 micrograms produces hallucinogenic effects that last from 8 to 10 hours.

13. Although non addicting, LSD has a frequently noted effect on users--a change in their value systems. Ambition dwindles, purpose in life goes, and often plans for careers are dropped.

14. Insufficient scientific experimentation has been done with LSD, consequently scientists still do not know just how LSD acts on a person. Also, not enough is known about the drug's immediate and long-term effects on the human body and mind.

15. So little is known about LSD's potential in medicine that the drug is not yet available on the prescription market.

16. Reports from psychiatric clinics have called attention to possible irreversible organic brain damage resulting from the use of LSD.

17. Recent studies have shown that the use of LSD can result in chromosomal damage and potentially mentally or physically deformed children.

18. LSD, like the other hallucinogens can induce a psychological dependence.

19. LSD, like the other hallucinogens has an attraction for adolescents and young adults. The drugs have a particular attraction for the socially maladjusted or the emotionally inhibited individual who is seeking new "experiences", "kicks", or "insights".

20. The big "kick" in LSD is in the area of sensory perception. Normal sensory experiences are expanded, exaggerated or distorted when an LSD user is on a "trip". (When a person is under the influence of LSD, he is said to be on a trip). The sensory information received by the brain can be so jumbled or mixed that the user may feel that he is tasting color or feeling music with his body.

21. The sensory distortions may or may not be enjoyed. Authorities indicate that a high percentage of people taking LSD experience unpleasant emotions or sensations-many experiencing panic or fear that they are losing their mind. Others may have a pleasurable experience verging on ecstasy or of a mystical religious nature.

22. Some LSD users claim an experience of mind expansion--deeper insight into life or an expansion of creative abilities in art and music. This, however, seems to be the user's belief; observers have reported a deterioration of ability.

23. LSD induced mind changes are unpredictable and may produce irrational and uncontrolled behavior.

24. LSD induced mind changes may result in personality change with the person thinking he is someone or something else.

25. The LSD mind changes may cause panic or extreme depression resulting in suicide, attempted suicide or accidental death.

26. The LSD abuser's response to the drug is usually temporary. However, the changes may herald a long-lasting mental breakdown, causing serious mental disorders requiring protracted psychological treatment.

27. "Flashbacks" of LSD experiences have been reported. The sudden recurrence of an LSD "trip" may occur months after the ingestion of the initial dose.

28. Individual response to LSD is dependent upon the person. The experience is influenced by the abuser's life style, psychological make up or mental health and mood.

29. There is no way to tell when adverse reactions to LSD will occur and there is no way to eliminate the possibility of bad effects.

f. Amphetamines or "pep pills" are regularly abused mood producing drugs.

1. The drugs were first produced in the 1920's for medical use. Amphetamines are strong central nervous system stimulants. The drugs are best known for their ability to combat fatigue and sleepiness and to curb appetite.

2. The amphetamines have a capacity for stimulation of the central nervous system with small doses limited to a state of "well being". With larger doses, apprehension, talkativeness, and tremor occur.

3. Paths to dependence on stimulant drugs vary. Most cases of dependency stem from the illicit market where drugs are sold to a variety of customers--the truck driver who wants to stay awake on long hauls, the student who wants to stay awake to study, or the teenager or young adult trying them for a "kick". Then, too, some drug dependence may start in the physician's office where a prescription for amphetamines may be given as treatment for depression or as an aid in weight reduction.

4. Over-medication with stimulants does not lead to physical dependence, but a psychological dependence may develop. The body does, however, develop a tolerance to the drug with larger and larger doses needed for the effects to be felt.

5. People on very large doses of amphetamine exhibit a social withdrawal, appear to have dulled emotions and seem to have a disorganized thinking process.

6. Stimulants have valuable medical uses but pose a hazard when used capriciously by individuals.

7. The stimulant drugs can allow a person to perform beyond his physical endurance leaving him exhausted, sometimes pushing himself to a hazardous point of fatigue.

8. Abuse of amphetamine type drugs, like abuse of other drugs, usually indicates an underlying form of psychopathology reflecting some form of psychological or behavioristic disorder. The stimulant is used by some abusers as a means of adjusting to problems of living and coping with emotional difficulties.

9. Sale of amphetamines without a prescription is illegal.

10. In the sub-culture of the drug world, the use of methamphetamines (methedrine) has become popular.

11. Methedrine abusers, "speed freaks", have been getting their "kicks" injecting melted crystals of methedrine into their bodies.

12. Those who "mainline"--inject intravenously--methamphetamine are in danger of abnormal heart rates, psychotic states, long term personality disorders, or even death. Two common dangers from unsanitary injections of "speed" are abcesses and serum hepatitis.

g. Barbiturates or "goofballs" are potent sedatives used for relaxing the central nervous system. Barbiturates are depressants made from barbituric acid. The first barbiturate, Veronal, was introduced in 1903.

1. Used properly with the advice and prescription of a physician, barbiturates can be of value. Doctors prescribe sedatives in the treatment of high blood pressure, epilepsy and insomnia; in the diagnosis and treatment of mental illness; and to relax patients before and during surgery.

2. Barbiturates are used widely both legally with a doctor's prescription and illegally through purchases on the black market.

3. When barbiturates are taken in normal, medically supervised amounts they will mildly depress the action of the nerves, skeletal muscles and the heart muscle. Barbiturates will slow the heart rate, the breathing and lower blood pressure.

4. The effects of larger doses of barbiturates resemble alcoholic intoxication--slurred speech, confused thoughts, and staggering.

5. The barbiturate abuser finds his ability to think, to concentrate and to work impaired. The person may find himself so.totally involved that he is in a state of semipermanent stupor, spending most of his time in bed.

6. Large doses of barbiturates may cause death. An overdose of the depressant may interrupt the life sustaining brain functions that regulate heartbeat and breathing.

7. Regular use of certain barbiturates may result in psychological and/or physical dependence.

8. Tolerance for barbiturates may develop with regular use of the drug with small doses no longer producing the expected or desired effects.

9. Discontinuance from regular use of barbiturates will result in withdrawal illness. Withdrawal should be affected under medical supervision for there is a danger of death resulting

h. The opiates or so called hard-narcotics are derived from the opium poppy. Opium was used by the Egyptians as far back as 1500 B.C.

1. Opium and its derivatives have been used to relieve pain and to achieve a euphoric feeling.

2. Opium and its derivatives can cause psychological and physical dependence.

3. The more commonly abused narcotics are opium, morphine, heroin, codeine, methadone and meperidine. Opium itself is not a significant problem today in America.

4. Morphine, first extracted from opium in 1805, has a valuable use in medicine in relieving severe pain.

5. Known in the drug sub culture as "M", "Miss Emma", "White stuff" or some other local slang name, morphine is widely used but is second place to heroin among abusers of hard narcotics.

6. Heroin, by far the greatest problem substance in narcotic abuse, is familiar to an estimated 65,000 addicts and is used by about 92 per cent of those dependent on hard narcotics. It is difficult to get true statistics on the extent of drug abuse.

7. Heroin is synthesized from morphine and is several times more potent than the parent drug.

8. The illicit heroin traffic originating on the east coast of the United States is fed chiefly by opium grown in Turkey, manufactured in France, and smuggled into New York.

9. Much of the world's supply of heroin originates in China where it is legally produced for export to other parts of the world.

10. Pure heroin is valued on the illicit drug market at between ten and fifteen thousand dollars a kilo. The pure heroin is cut or diluted to a mixture of 3 or 4 per cent heroin.

11. Because of the high profits from heroin, big time crime has been involved in the supply and distribution of the drug.

12. The effects of heroin are generally the same as other narcotics. The drug is quick acting, exerting a depressant effect directly on the nervous system and indirectly on all physiological activities of the body. Heroin will slow circulation and respiration, lower blood pressure, reduce metabolic rate, impair thinking and coordination, produce grogginess, create a euphoric state, and induce stupor or coma.

13. The heroin abuser can very quickly develop a physical and psychological dependence on the drug.

14. The body develops a tolerance for heroin, hence, there is a tendency to increase the dosage.

15. Long range physical reactions to heroin are loss of appetite, malnutrition and constipation.

16. The abuser is always in danger of death from an overdose of heroin.

17. The heroin abuser is in danger of hepatitis, tetanus, blood poisoning, abscesses or other infections brought on by impure narcotics or unsterilized hypodermic needles or other instruments used to open the vein and inject the heroin.

18. The most important effect of heroin for the abuser is euphoria, that sense of well-being and contentment or feeling that all is right with the world which he experiences right after his injection or "fix." This is the big "thrill" or "kick" that the addict lives for.

19. The heroin addict becomes absorbed in his dependence on the narcotic. He finds it difficult to hold a job at a time when his "habit" becomes most expensive.

20. To feed his "habit" a heroin addict needs as much as $50 or more a day and to get this kind of money most turn to crime.

21. Many heroin addicts begin as "joy poppers," those who shoot heroin only occasionally. These people are also said to have a "week end" habit since they may take heroin infrequently or on week ends for "kicks."

22. More than 90% of all addicts who take the cure eventually return to drugs. Some have taken the cure several times.

23. Through medical treatment a heroin addict can be physically withdrawn from the drug in a fairly short time. However, he may suffer a general malaise for several months.

24. Abrupt and complete withdrawl of heroin from an addict with a strong physical dependence on the drug may result in severe physical pain and discomfort and could in some instances prove fatal.

25. Codeine, another of the opiates, is an effective pain reliever and has been used medically to relieve mild pain and coughs.

26. Some drug abusers have used codeine cough syrup because it contains both codeine and alcohol.

27. Like other opiates codeine is addictive. Both physical and psychological dependence can develop in the codeine abuser.

28. Codeine cough syrup, taken in sufficient quantity can cause dependence.

29. Two synthetic substitutes for morphine are meperidine (Demoral or pethidine) and methadone (Dolophine), developed along with hundreds of other pain relieving drugs in the parmacologists search for non-addicting pain relievers. Invariably the new drugs are found to be addicting.

30. Some experimentation is presently being done with methadone as a treatment for heroin and morphine dependence.

31. An inexpensive narcotic, methadone, shuts out the effects of heroin and fulfills the addicts physical need for the drug. The experiment so far only substitutes one narcotic for another. But, the addict being treated with methadone can make psychological adjustments and is able to re-establish some stability in his life.

32. Cocaine, a stimulant legally classified as a narcotic, does not have the properties of other narcotics.

33. Although abuse of cocaine does not lead to physical dependence, the drug is strongly habit forming and psychological dependence may result.

34. Recognized as a dangerous drug cocaine is highly toxic, and its abuse leads to loss of weight, body debilitation, and mental deterioration.

35. Cocaine ordinarily appears as an oderless, white, fluffy, crystalline powder similar in appearance to snow; hence the jargon name of "snow" for the drug and "snowbird" for the user.

36. Frequently sniffed by the abuser, cocaine is also injected intraveneously into the bloodstream.

37. A combined injection of cocaine and heroin is called a "speedball" which is a potent concoction.

SOME SUGGESTED LEARNING EXPERIENCES:

a. Have students research the micro concepts in the literature.

b. Have students present oral reports.

c. Encourage student discussion of the micro concepts.

d. Invite in resource speakers such as a doctor, a representative from Marathon House, a pharmacologist, or a representative from the local police force.

SOME SUGGESTED TEACHING TECHNIQUES

a. Discussion group

b. Group procedure (group work).

c. Lecture (by resource people)

d. Panel presentation

Vocabulary:

analgesics
synthetics
"masking" agents
euphoria
pharmacology
subcutaneously

dysphoria
nausea
lethargy
barbiturates
morphine
heroin

Vocabulary: (continued)

pupillary constriction
tolerance
addiction
habituation
tranquilizers
depressants
amphetamines
cocaine
fatigue
withdrawal symptoms
toxicity
dependence

SOME INSTRUCTIONAL MATERIAL:

1. Bloomquist, E. R., M.D., Marijuana, Glencoe Press a Division of the Macmillan Company, Beverly Hills, Collier-Macmillan Limited, London, 1968, 215pp., (Thorough coverage of the study of Marijuana. The author gives information that the pro-cannabis writers are inclined to omit.)

2. Cashman, John, The LSD Story, Fawcett Publications, Inc., Greenwich, Connecticut, 1966, 128 pp.

3. Drug Abuse: Escape to Nowhere, Smith Kline and French Laboratories, Philadelphia, in cooperation with the American Association for Health, Physical Education and Recreation, a department of the National Education Association, 1967, pp. 27-43.

4. Drug Abuse: The Chemical Cop-Out National Association of Blue Shield Plans, April, 1969, pp. 1-20

5. Dependence on Amphetamines and Other Stimulant Drugs, see appendix E.

6. Dependence on Barbiturates and Other Sedative Drugs, see appendix E.

7. Dependence on Cannabis (Marijuana), see appendix E.

8. Dependence on LSD and Other Hallucenogenic Drugs, see appendix E.

9. De Ropp, Robert, Drugs and the Mind, Grove Press, Inc., New York, 1957, 310 pp.

10. Houser, Norman W., In consultation with Julius B. Richmond, M.D., Drugs, Facts on Their Use and Abuse, Scott, Foresman and Company, Glenview, Illinois 60025, 1969, pp. 7-35.

11. Kitzinger, Angela and Patricia J. Hill, Drug Abuse, A Source Book and Guide for Teachers, California State Department of Education, 1967, pp. 3-53.

12. Marijuana and Society, see appendix E.

13. Marijuana Thing, see appendix E.

14. Nowles, Helen H., Drugs on the College Campus, Anchor Books, Doubleday and Company, Inc., Garden City, New York, 1969, pp. 4-20 and 77-109.

15. Soloman, David (editor), The Marijuana Papers, A Signet Book Published by the New American Library, 1301 Avenue of the Americas, New York, New York 10019, 1966, 509 pp.

16. Vogel, Victor H., M.D. and Virginia E. Vogel, Facts About Narcotics and Other Dangerous Drugs, Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois 60611, 1967, pp. 11-31.

CONCEPT SIX: SOCIO-PSYCHOLOGICAL CONDITIONS PLAY A ROLE IN DRUG ABUSE

MICRO CONCEPTS:

a. Narcotic abuse is a severe problem of the big urban areas and most frequently in the poverty areas of the cities; however, the problem has been spreading to the suburbs and all socio-economic levels.

b. Young people seeking thrills or kicks have turned to drug abuse. For many this is a big adventure.

c. Drugs are sought as mood producers so that the abuser can escape into a euphoric world.

d. The well-adjusted individual has no need for mind altering substances.

e. Neurotics and psychopaths make up a group of people referred to as addiction prone. These people have emotional difficulties that make drugs appear attractive.

f. Young people can be led into drug abuse through curiosity, through an effort to be more "grown up", and through gang spirit and peer pressure.

g. In some, drug abuse is a manifestation of rebellion against family and/or society.

h. For some people drug abuse is a means of escape from financial problems, family troubles, ill health, poor grades, job pressures, dissatisfaction with mode of living, or general frustration.

i. American society, a society dedicated to progress through chemistry, is drug oriented with vast quantities of drugs available for many purposes. Many kinds of drugs are available without prescription and are advertised in the communications media.

j. For some, drug abuse is an effort to achieve self identity and an escape from society's conformity.

SOME SUGGESTED LEARNING EXPERIENCES:

a. Arrange for resource speakers to talk on the sociological and psychological problems of drug abuse.

b. Have students read in the literature on the problem.

c. Have students prepare special reports.

d. Have a group of students prepare a chart illustrating drug abuse by social strata.

e. Have some students prepare reports on "Narcotics Abuse as an Urban Problem", "Drug Abuse Among High School Students", "Drug Abuse on the College Campus", "Drug Abuse as a Social or Psychological Escape", "Drug Abuse and Peer Pressures", "The Drug Oriented Society", etc.

f. Have some students prepare for panel presentations. Topics would be like those in "e" above.

g. The teacher can make use of small group discussion related to "e" and "f" above. Student interaction should be encouraged.

h. A series of role situations can be developed by the teacher with students acting out roles.

SOME SUGGESTED TEACHING TECHNIQUES:

a. Teacher lecture

b. Resource Lecturer

c. Problem solving

d. Role playing

e. Panel presentation

f. Special student reports

g. Small group discussion

Vocabulary:

psychopaths
neurotic
socio-economic
society
urban
suburban

SOME RESOURCE MATERIAL:

1. Drug Abuse: The Chemical Cop-Out, National Association of Blue Shield Plans, April, 1969, pp. 19-23 and 36-42.

2. Houser, Norman W. In consultation with Julius B. Richmond, M.D., Drugs, Facts on Their Use and Abuse, Scott, Foresman and Company, Glenview, Illinois 60025, 1969, p. 30.

3. Leech, Kenneth and Brenda Jordan, Drugs for Young People, Their Use and Misuse, The Religious Education Press, Ltd. (A member of the pergagon Group), Heading Hill Hall, Oxford, 1967, pp. 60-75

4. Nowles, Helen H., Drugs on the College Campus, Anchor Books, Doubleday and Company, Inc., Garden City, New York, 1969, pp. 21-31.

5. Vogel, Victor H., M.D. and Virginia E. Vogel, Facts About Narcotics and Other Dangerous Drugs, Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois 60611, 1967, pp. 35-41.

6. Wakefield, Dan (editor), The Addict, Fawcett Publications, Inc., Greenwich, Connecticut, 1963, "The Addict Psychology," Charles Winick, p. 47.

CONCEPT SEVEN: DRUG ABUSE CAUSES PROBLEMS FOR THE INDIVIDUAL, THE FAMILY, AND SOCIETY.

MICRO CONCEPTS:

a. Drug abuse causes problems for the individual.

1. Thousands die every year from overdose of drugs or narcotics.

2. Narcotic abuse frequently leads to a life of crime in the abusers effort to "feed" his "habit". Male addicts frequently engage in property crimes--petty theft, larceny, house breaking or robbery while female addicts turn to prostitution.

3. People who buy, sell, or possess illicit drugs or narcotics are transgressing the law and are liable to its penalties.

4. Many drug abusers, especially those involved with hallucinogens, die from an inability to perceive and evaluate dangers. Since common sense and normal judgment disappears, the abuser is prone to his own self destruction.

b. Drug abuse causes problems for the family.

1. There is usually family anguish, separation or break-up when a member becomes involved with drug or narcotic abuse.

2. Sometimes the family bears the expense of legal fees, medical and psychiatric care and rehabilitation of the drug or narcotic abuser.

3. Medical authorities claim that chromosome breaks caused by LSD may affect yet unborn babies. The characteristics could even show up in the user's grandchildren.

4. Family pride is frequently hurt when the family name is associated with the notoriety of drug abuse.

Drug abuse causes problems for society.

1. The drug abuser is a traffic hazard.

2. Many abusers of drugs and narcotics have "dropped out" of society and no longer make worthwhile contributions.

3. Drug abuse is costly to society in providing addicts with welfare, treatment, and rehabilitation; and in terms of property loss from theft and robbery and loss from drug associated accidents.

4. The maladjusted drug abuser frequently enters the "turned on" "dropped out" world--a sub culture which has left a legacy for the "straight society" of illegitemacy, non-productiveness, welfare dependency, disease, ignorance and lack of productive skills.

5. Society must bear the burden of the many cases of mental illness brought on by drug abuse.

6. Some addicts become "pushers", selling drugs to earn enough to "feed" their habit.

NOTE: Since the individual, family and society are interrelated, most of the preceding concepts in a, b, and c are interrelated.

SOME SUGGESTED LEARNING EXPERIENCES:

a. Have students read in the literature on the problems.

b. Have students collect news items that pertain to the problem and prepare a bulletin board.

c. Prepare a series of role situations for students to act out.

d. Arrange for resource speakers, for example, a representative from social welfare, family court, Marathon House, or the State Mental Hospital.

e. Have small group discussion of the problems with much student interaction encouraged.

f. Have the problems listed and illustrated for the bulletin board.

SOME SUGGESTED TEACHING TECHNIQUES:

a. Resource lecture

b. Problem solving

c. Role playing

d. Small group discussion

SOME RESOURCE MATERIAL:

1. Cashman, John, The LSD Story, Fawcett Publications, Inc., Greenwich, Conn., 1966, pp. 105-114.

2. Drug Abuse: The Chemical Cop-Out, National Association of Blue Shield Plans, April, 1969, (Information for Concept 7 is interspersed throughout the booklet).

3. Houser, Norman W. In consultation with Julius B. Richmond, M.D., Drugs, Facts on Their Use and Abuse, Scott, Foresman and Company, Glenview. Illinois 60025, 1969, pp. 41-46.

4. Vogel, Victor H., M.D. and Virginia E. Vogel, Facts About Narcotics and Other Dangerous Drugs, Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois 60611, 1967, pp. 32-34 (Other information is interspersed throughout the booklet.).

5. Wakefield, Dan (editor), The Addict, Fawcett publications, Inc., Greenwich, Conn., 1963.

CONCEPT EIGHT: TREATMENT OF INDIVIDUALS FOR DRUG ABUSE IS DIFFICULT AND OFTEN INEFFECTIVE.

MICRO CONCEPTS:

a. Most heroin addicts return to drugs following treatment.

b. In 1929 Congress authorized the construction of treatment facilities. The center at Lexington, Kentucky was opened in 1935 and the center at Fort Worth, Texas, was opened in 1938.

c. Physical withdrawal from narcotics can be painful, but the difficult part of curing the addict is the break from psychological dependence which must take place after the physical withdrawal has occured.

d. Narcotic withdrawal can be accomplished in two ways--gradual withdrawal under medical supervision in a hospital or by going "cold turkey," the sudden and complete elimination of drugs from the system.

e. The addict is a sick person who needs medical and psychiatric treatment under close supervision.

f. The illness of drug addiction has usually resulted from personality disorders or poor social adjustment; therefore, the addict returning to the community after hospitalization needs help from family, friends and community to make a stable adjustment.

g. The Narcotic Addict Rehabilitation Act of 1966 recognizes the addict as a sick person and provides for his civil commitment for treatment and rehabilitation both when charged with violating Federal criminal laws as well as when not facing such charges.

h. Addicts need to make psychological adjustments after withdrawal from drugs in order to develop stable lives. This treatment can be long, difficult and often end in failure.

i. Interesting experiments in cure and rehabilitation involving groups of addicts who attempt to make the psychological break from narcotics are being made at centers like Daytop Village in New York, Synanon on the West Cost, and Marathon House in Rhode Island. The centers are run by the addicts themselves and those who become involved must have a strong desire for help.

j. Experiments are presently being conducted using the synthetic narcotic, methadone as a substitute for opiates in affecting a cure of opiate addiction. Methadone shuts out the effects of the opiate at the same time fulfilling the addicts physical need for the drug.

SOME SUGGESTED LEARNING EXPERIENCES:

a. Have students read in the literature.

b. Arrange for guest resource speakers--for example, a representative from Marathon House, a medical doctor, a psychiatrist, and/or a probation officer.

c. Arrange for a visit by a group to Marathon House.

d. Arrange a student panel presentation of the "American System of Treatment"vs. the "British System of Treatment."

SOME SUGGESTED TEACHING TECHNIQUES:

a. Lecture by resource speaker.

b. Panel presentation

c. Small group discussion

SOME RESOURCE MATERIAL:

1. Drug Abuse: Escape to Nowhere, Smith Kline and French Laboratories, Philadelphia, 1967, pp. 45-53.

2. Drug Abuse: The Chemical Cop-Out, National Association of Blue Shield Plans, April, 1969, pp 23-25.

3. Vogel, Victor H., M.D. and Virginia E. Vogel, Facts About Narcotics and Other Dangerous Drugs, Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois 60611, 1967, pp. 42-49.

4. Wakefield, Dan (editor), The Addict, Fawcett Publications, Inc., Greenwich, Conn., 1963, "Going to Lexington," Alexander King, pp. 126-138 and "The Synanon Experiment," Jane Kramer, pp. 177-182.

CONCEPT NINE: LEGAL ACTS AND THEIR ENFORCEMENT PLAY A MAJOR ROLE IN THE EFFORT TO CURB AND CONTROL NARCOTIC USE, DRUG EXPERIMENTATION AND DRUG ABUSE.

MICRO CONCEPTS:

a. The major responsibility for enforcement of Federal drug-control laws falls under the jurisdiction of the Bureau of Narcotics and Dangerous Drugs and the Bureau of Customs.

b. Forty-six states, the District of Columbia and Puerto Rico have adopted the Uniform Narcotics Drug Act of 1932. Penalties vary from state to state, but otherwise state laws conform closely to the Federal law.

c. Invariably, penalties for the sale of narcotics and illicit drugs are the most severe.

d. The Harrison Act of 1914 was designed to control the production, manufacture and distribution of addictive drugs. The act did not provide for the treatment and cure of addicts.

e. The Narcotic Import and Export Act of 1922 was enacted with the intention of eliminating the use of narcotics in the United States except for legitimate purposes.

f. The Marijuana Tax Act of 1937 provides control over Cannabis similar to those the Harrison Act has provided over narcotics.

g. The Opium Poppy Control Act of 1942 prohibits the cultivation of opium poppies in the United States except when the grower is licensed.

h. The Boggs Act of 1941 has established seven, mandatory sentences for conviction of narcotics charges and limits the suspension of sentences or the granting of probation or parole.

i. The Narcotics Control Act of 1956 was an effort to establish very severe penalties for the unlawful sale of narcotics or marijuana. A first offense conviction (for sale between adults) mandates a 5 to 10 year sentence with an optional fine up to $20,000 with no probation or parole allowed.

j. The Abuse Control Amendments of 1965 are changes in the Federal Food, Drug and Cosmetics Act and are applied to depressant and stimulant drugs other than narcotics. The amendments have provisions to add new substances as the need arises while presently covering barbiturates, amphetamines, LSD and other hallucinogens and comparable drugs. The Amendments place strict controls over the illegal manufacture, distribution, possession, or prescription of these drugs and increase the enforcement powers of the inspectors.

k. The punitive approach to the drug problem in many instances seems to have had little deterrent effect on the addict or the dealer in drugs. Further, even with the present laws, the drug traffic has not been suppressed and the problem has continued to spread.

l. Many governments have been concerned with protecting their people from the misery, crime and degredation associated with drug abuse. They have cooperated in the control and distribution of various drugs. Some progress in drug control has been worked through the United Nations Commission on Narcotic Drugs and the World Health Organization.

m. Most Federal, State and local laws related to narcotics and drug abuse provide severe penalties for conviction. It should be pointed out that whether one agrees with the severity of the current laws or not, they are still present and the law. The best way to avoid them is to not become involved with narcotics or drug abuse.

SOME SUGGESTED LEARNING EXPERIENCES:

a. Have students read in the literature.

b. Arrange for resource speakers, for example, a representative from the local or state police, the State Department of Health Division of Food and Drug Control, a lawyer, etc.

c. Have students conduct a mock trial based on real cases.

d. Prepare a series of role situations for students to act out.

e. Have students debate the merits of severe penalties for drug and narcotic violations.

f. Have students develop their plan for narcotic and drug abuse control.

SOME SUGGESTED TEACHING TECHNIQUES:

a. Guest lecturer

b. Small group discussion

c. Role playing

d. Special report.

SOME RESOURCE MATERIAL:

1. Bloomquist, Edward R., M.D., Marijuana, Glencoe Press a Division of the Macmillan Company, Beverly Hills, 1968, pp. 129-154.
2. Drug Abuse: A Manual for Law Enforcement Officers, 2nd Edition, Smith Kline and French Laboratories, Philadelphia, Pennsylvania, 1966, pp. 17-54.
3. Drug Abuse: The Chemical Cop-Out, National Association of Blue Shield Plans, April, 1969, pp. 32-36.
4. Drug Abuse: Escape to Nowhere, Smith Kline and French Laboratories, Philadelphia, 1967, pp. 80-82.
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6. Nowlin, Helen H., Drugs on the College Campus, Anchor Books, Doubleday and Company, Inc., Garden City, New York, 1969, pp. 32-52.
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9. Wakefield, Dan (editor), The Addict, Fawcett Publications, Inc., Greenwich, Conn., 1963, "History of a Nightmare," by Marie Nyswander, "Torture By Law," by Alfred R. Lindesmith, pp. 20-42.

APPENDIXES

APPENDIXES

APPENDIX A

APPROACHES TO A DRUG ABUSE PROGRAM

Most communities have come to the awesome realization that students "must" be educated to the dangers associated with the use and misuse of drugs and narcotics. It is another thing entirely, however, for the schools in the communities to provide the right kind of education relative to the drug problem.

The one-shot program, utilizing resource people such as state or local police, druggists, medical doctors, addicts or ex-addicts, social workers, etc., in an assembly program once a year, is of little or no value. Also doomed to failure are the kinds of programs designed by relatively uninformed teachers who are assigned the job of including a few remarks about drug addiction in his program while he also talks about alcohol, tobacco and sex. Teachers who know less about drugs than their students are marked for failure. Anything less than a well planned, coordinated, implemented program will no doubt range from ineffective to catastrophic.

Educators cannot take the attitude that any meager effort is good, or that once the subject is introduced through an assembly speaker the "law has been covered," or that a haphazard "crash program" will do the job.

Specifically, however, there are some practical things each school or school district can do to insure that they are coming to grip with the drug abuse problem. It is recommended that schools:

1. Include material relative to the drug and narcotic problem in the basic curriculum beginning in the kindergarten, long before most children are confronted with the problem, and continue on through the 12th grade.

2. Utilize for instruction only personnel who are well informed about drugs and narcotics. Further, any person on the staff who will be in a position to counsel students should be fully informed about drugs and student attitudes.

3. Present information on drug abuse truthfully and graphically making every effort to tell the story as it actually is. Shock and scare techniques should be avoided - let the examples of what can happen to the drug user speak for themselves.

4. Realistically recognize the extent of the drug problem in their community. They should avoid the "ostrich mentality" when facing the local drug problem

5. Use energenic, dynamic techniques of presentation. The lecture method should be infrequently used and then only by visiting resource people.

6. Provide copious resource material for both students and teachers.

7. Make frequent use of audio-visual aids in the drug abuse program.

8. Organize a planning committee composed of administration, faculty, students, parents, civic leaders and law enforcement officials.

9. Develop a list of community resources and resource people that can be used in the program.

10. Develop an inservice program for administration and faculty designed to inform them about the teenager and the drug abuse problem.

APPENDIX B

SCHOOL HEALTH INSTRUCTION

A Position Paper

Health has been described in comprehensive terms as: "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity."[1]

As early as 1842, Horace Mann underscored health as an educational objective.[2] More recently, it can be documented that, when any major group of professional educators has set for itself the task of enumerating the American objectives of education, almost invariably included on such a list has been the subject of health.[3]

However, recent research would indicate that our schools have not progressed far toward successfully achieving this end. Health and safety misconceptions among our school children are alarming.[4,5] Health defects among youngsters are numerous and varied.[6] A reprint of a study of Selective Service registrants originally published in 1964 shows that 11.3% of those involved in the review were disqualified for medical reasons only.[7] At present, many communities across the land share a growing concern for the increase in pregnancies among their junior-high and high-school girls.[8] And, among those who have already left their school years behind them, too many too soon die or are disabled by diseases which are preventable. The conclusion is clear: "In a majority of our public schools today, health instruction is virtually non-existent or totally inadequate to serve the compelling needs of a rapidly expanding, increasingly complex society."[9]

If, therefore, life expectancy is to be lengthened, if those diseases which are preventable are to be prevented and those arrested which can be arrested, then our citizens must - from their earliest days - be conditioned to these possibilities.

Anti-smoking campaigns make little impact upon the teenager or adult who already smokes. The threat of invasive or corrosive chronic disease does not impel persons to their physicians for annual physical examinations. As often as the warnings come of the effects of drinking, driving and excessive speed, these threats do not deter a breakneck increase in death and injury from automobile accidents.

Interesting, timely and viable school health instructional programs will not completely alter these human conditions, but eventually they would allow our population a more knowledgeable choice between illness and wellness - a choice which is their right, a choice which would make serious inroads upon present-day and future health problems.

Therefore, we affirm our position that:

1. Health instruction is a curricular essential at all levels of education but particularly at the elementary and secondary grades.

2. Health instruction is but one of three facets of a comprehensive school health program, the other phases being comprised of a healthy school environment and an adequate array of school health services.

3. Health instruction, to be optimally effective, must function in a planned kindergarten-thru-grade-twelve continuum, with proper attention given to sequence and scope of content. Uncoordinated, special interest health instructional efforts, exemplified by overemphasis on particular disease entities or family or community health problems, should be avoided.

4. Health instruction is most effectual when treated as a separate subject within the elementary and secondary grades. However, in addition, it may be combined with other subject areas such as social studies, science or physical education.

5. At the elementary level, health instruction is best given by the child's classroom teacher. The elementary classroom teacher should be as well prepared to teach in the health instructional area as he should be to teach in any other major subject area.

6. At the secondary level, health instruction is best inculcated by a teacher who has received special training in school health education.

7. Sufficient time should be devoted to health instruction at the elementary and secondary levels of education to allow each pupil to achieve now and in the future, and to the degree possible, "complete physical, mental and social well-being."

8. Sufficient in-service health educational courses should be provided at the local level to allow presently employed classroom teachers - especially those at the elementary level - to confidently handle the subject matter in the classroom situation. Such curricula should include content areas and not be limited merely to instruction in methods and materials.

9. Health instructional materials at all grade levels should be supplied in quantities which will meet the needs of pupils and their teachers; these materials should be interesting and timely, and scientifically accurate.

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1. Irwin, L. W.; Cornacchia, H. J.; Staton, W. M.: Health In Elementary Schools. The C. V. Mosby Company, St. Louis, 1962, p. 28.
2. National Education Association; American Medical Association: Health Education. National Education Association, Washington, D. C., 1961, p. 13.
3. Ibid, pp. 2-4.
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7. Lesser, A.: Health of Children of School Age. United States Government Printing Office, Washington, D. C., 1964, p. 8.
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APPENDIX C

RHODE ISLANDERS VIEW DRUG ABUSE

THE ROLE OF THE ATTORNEY GENERAL'S DEPARTMENT IN COMBATING DRUG ABUSE

by: Herbert F. DeSimone
Attorney General
State of Rhode Island

Vigorous enforcement of the narcotics laws of Rhode Island, of course, is the prime responsibility of the Attorney General and in addition thereto the very important area of drug abuse prevention has been and is a major concern of the Attorney General.

The Department of the Attorney General prosecutes in the District Courts throughout the State all violations of the narcotics laws of the State of Rhode Island, both felonies and misdemeanors, on charges preferred by the Rhode Island State Police Department and the narcotics inspectors of the Rhode Island Department of Health. All appeals to the Superior Court from the District Courts of convictions on narcotic law violations classified as misdemeanors are prosecuted by this department in the Superior Court.

All indictments for violation of the narcotics laws classified as felonies, presented by the grand juries for the various counties of Rhode Island, are prosecuted by the Attorney General's Department in the Superior Court.

The State of Rhode Island is represented by the Attorney General in all appeals to the Rhode Island Supreme Court on violations of the narcotics laws.

Because of the problems of drug abuse, particularly by young people, a Division of Youth and Narcotics has been established within the Attorney General's Department to concern itself with this matter. This Division has arranged and presented numerous programs of education on the subject of drug abuse to thousands of students of public, private and parochial schools throughout the State of Rhode Island and also to many civic, fraternal, service and social clubs and organizations consisting of adult and parents groups. Student seminars have been held at colleges and universities within the State.

The programs of drug education consist of presentations by experts in the drug abuse field, such as pharmacists, a professor of pharmocology, the food and drug administrator, narcotics agents and members of the Attorney General's staff and the showing of educational films on this subject.

Efforts have been made by the Attorney General to mobilize community interest and support of educational programs to deal with this vexing problem.

Members of the Attorney General's drug education panel of experts have appeared on radio programs and television programs dealing with the problems of drug abuse in Rhode Island.

The Attorney General has developed a close liaison with Marathon House, a drug addiction rehabilitation facility situated in Coventry, Rhode Island. Known drug addicts who have been indicted either on drug offenses or for crimes directly related to drug addiction are screened by the Attorney General's Department so that proper recommendations may be made to the Rhode Island Superior Court as to the possibilities for the rehabilitation of these addicts. A cooperative effort by and between the Attorney General and the United States Attorney for the District of Rhode Island has been undertaken to prepare and present to the United States District Court petitions of opiate addicts for commitment to rehabilitation facilities under the provisions of the "Narcotic Addict Rehabilitation Act of 1966" by the United States District Court.

The Attorney General's Department continues to foster and support constructive programs to educate the youth and adults of Rhode Island regarding drug abuse problems with the fervent hope that by such programs drug abuse may be effectively prevented.

THE POLICE ASPECT OF DRUG ABUSE CONTROL

by: Stanley Gontarz
Chief of Police
Barrington Police Department

For many years an array of federal and local law enforcement agencies have been literally engaged in a war against narcotic addiction. In the prosecution of that war, a classic military tactic has been employed, namely, direct action against the enemy's supply lines. The fact that narcotics addiction has not been eliminated is not an indictment of this method of operation, rather it points up the need for an improved effort by a wider portion of an interested community. Community concern about drug abuse must be translated into action.

The holding of this evil within its present bounds is a losing battle. In a big city almost 45% of all the people arrested for felonies and serious misdemeanors were narcotic users; 93.4% of all the narcotic users arrested were heroin users; 4.3% were marijuana users. These few figures are significant; this is a problem society cannot endure for too long without serious effects to the whole system. The problem shows more clearly the relationship of drug addiction to crimes other than narcotics addiction.

The basic police problem is to place into effect measures effective enough to suppress illegal acts that very often are the product of willing co-conspirators. On the one hand we have a clear-cut mandate, in the form of substantive law, to investigate and arrest violators of the Narcotics Laws (possession and sale); while on the other hand, we do not have complainants that come forward in the same manner as in ordinary criminal cases. Since the information and witnesses are difficult to come by, and since this procedure has been fighting a losing battle, (as witness the gains in narcotics addiction and arrests), the police effort must be accompanied by an effort to make the preventative process more meaningful. This can be accomplished in several ways. One is to clearly show the dangers and consequences of narcotics abuse, legally and morally. This should make some impact on the segment of youth who will reason and respond by remaining aloof from the temptation and possibility of criminal prosecution.

Another is to reach, with an effective team of law-enforcement, social workers and psychiatrists, the users and their families in such a manner as to most effectively stop experimentation.

While control is not considered a police problem in many circles, it is evident through a program, such as "Marathon House" or the "Methadone" treatment, which effectively keep the problem from getting worse, must obviously fit into any comprehensive plan for an attack on narcotics abuse. Such programs have the immediate effect of removing from the illicit market customers who keep the vicious cycle moving, and the longer range effect of less criminality in order to support the habit, and observance of the related laws.

Drug Traffic and Other Police Problems

Illegal sale and/or exchange of drugs in the illicit market is one of the criminal problems that police can best cope with. Whether the "movement" is organized, on a large scale through a syndicated type of administration whereby most of the opium and cocaine derivitives travel, or whether it is a decentralized or localized distribution of the more sophisticated psychedelic drugs, such as L.S.D., synthetic TCH or other semi-legitimate pills, many criminal acts, with far reaching effects on the community, enter with each primary transgression.

The organized crime aspect of drug traffic has been quite thoroughly explored and exposed in recent years. The sale of narcotics is organized like a legitimate importing-wholesaling business. Conservative estimates of the number of addicts in the nation and the daily expenditure for heroin indicate that the gross heroin trade is $350 million annually, of which $21 million are probably profits to the importer and distributor. Most of this profit goes to organized crime groups in those few cities in which almost all heroin consumption occurs. An important fact to be stressed at this time would be that virtually all non-synthetic opium products and specifically heroin, which is the most commonly employed illegal drug, must come from other countries and requires criminal organization and money. This makes it virtually impossible for a previously non-participating individual or group to enter into this importing field. In addition, force and fear, which are the other necessary elements of "Organized Crime" are employed to discourage any novices from entering this lucrative industry. And lucrative it is, a kilo (2.2 lbs.) of opium purchased from a local "sheik," or poppy field owner, in the Near East for $15, reduced 90% to make ¼ of a lb. of pure heroin, may well bring $12,500 when finally retailed in $10 bags on the "street." During the transportation, processing and distribution, the original product is "cut" or adulterated many times, and the strength of the final "fix" depends a great deal on the greed of the overlords.

With the multi-million dollar international cartel leading the corruption and conspiracy vital to the smuggling and production of the contraband, everyone along the line is contaminated by any participation in the process. The most difficult portion of the criminal conspiracy to detect, arrest and convict is in the upper echelon, where the financial strength and power so vital to the scheme is concentrated. These higher-up never handle the contraband or are even present during its processing or sale. The result is an insulation consisting of expendable front men, who come and go in the criminal justice treadmill.

The volume of illicit drug traffic has increased yearly and customs seizures reached record-breaking proportions in 1968.

Heroin was up 215%.

Cocaine was up 143%.

Marijuana was up 166% over the previous year.

Arrests at Customs alone were up from 3,374 to 4,343.

Most of the heroin seized was from air passengers at international airports. However, the largest seizure was 26 lbs. from a vessel in Florida.

Violence is interwoven throughout, usually pistols and other weapons are commonly carried by smugglers and large sellers.

Assaults, murders and other crimes of a similar nature always accompany the narcotics conspiracy.

A single purchase of a $10 bag of heroin may involve the following as indicated in flow-chart, traveling from the seller up to the wholesaler:

2 persons illegal possession narcotic violation
" sale
↓
25 persons illegal possession (large quantity)
" sale
assault (to protect supply line)
" (to avoid hijacking)
bribery (to avoid arrest)
↓
5 persons murder (to eliminate informant)
(to eliminate competition)
↓
10 persons assault (to protect supply lines)
(to avoid hijacking)
↓
10 persons extortion - tribute to organized crime
↓
100 persons conspiracy - tieing in airline personnel, guards, truckers, etc.
100 " " tieing in ship's people
↓
20 persons possession - by mixers
↓
10 persons " - by chemists to refine

282 total

Marijuana reaches the user in one of several routes. First it may be homegrown, involving almost no organization and no great exchange of money. However, this local grown product, in this climate, has almost no tetrahydrocannibinol content and the lack of this resin reduces the hallucinogenic effect to almost nil.

Another path for marijuana is the organized group formed by interested young people who have found out about the large profits in the process of using or participating in groups that have sought and used "grass." These people will raise a sum of money, usually less than $1,000, and buy a fairly good grade of marijuana in Mexico or Canada. They will then "comb" and clean the dried and cured combination of leaf, stem and seeds and realize a profit ranging from 200 to 1000%. It is evident that success in this illegal venture often leads the people involved into greater and more dangerous illegal schemes. Finally, there is the organization which controls the bulk of narcotics in traffic and use today. Wherever the profits are large and large sums of money are the "starter," organized crime will step in, add force and fear, and produce spectacular and violent results.

The hallucinogenic drugs, part of a cycle in a search for relief, or escape, from the real or imagined problems involved in existing in an oppressive environment, by people who cannot, or will not cope with reality, are very prevalent today.

L.S.D. is perhaps the most commonly known chemical in this category. Usually these drugs are the products of clandestine laboratories and have to-date been distributed at a relatively cheap price with one or two "middlemen" to hike the price from time to time.

Finally, there are the amphetimines (pep pills) and barbiturates (sedatives), which invariably come to the market via larcenies and burglaries from established drug concerns. Organized crime has the key to all such operations, money and force. Employees of bonafide corporations are induced to divert shipments of these pills to the illegal warehouses. The people involved are either paid large sums or are in debt to loan sharks or gamblers to such a degree that cooperation is obtained as a form of relief. The pills are then supplied to "retailers" at profits up to 500% and supplied to users at about the same rate of profit. In addition the pill is sometimes reduced in size by "grinding," or the capsule is "tapped" for some of its content.

Control of addiction is possible; this program concept is now feasible. A "drug cult," although small, can be an extremely provacative group on a campus, or in a small tight community, incorporating a protestation, a demand, to be allowed its way of life and saying that no one should prevent it from carrying on its own private pursuits. These young people are still in a growing period. At times their intelligence outstrips their emotional growth and this tends to create a certain imbalance that produces anxiety. This anxiety and its treatment should be of a primary concern in a preventative treatment.

The high level of criminality involved in the process of drug abuse represents the greatest threat to an orderly and productive manner of living, and since this is the primary police task, to regulate every day conduct in conformance with the demands of the community, these far reaching effects must be coped with. The various factors that come to play in drug abuse must be brought to the attention of the whole community and especially to that portion which is in the process of habit formation and value examinations. The educator and schools must provide accurate and balanced information that will lead to a wide spread knowledge of the value of good health and mental practices on a personal and community basis.

The Federal Government must provide leadership and training; bringing together State and Local officials, chemists, college deans and security officers, educators and planners and drug industry officials, to help them to meet the problems of drug abuse more effectively.

Teachers' programs for college students who will become Health Science Instructors should include courses dealing with drug abuse and the related problems. In-service programs for all interested people should be instituted and maintained to keep up the level of information required to maintain a continued pressure on the drug problem.

An indirect, but perhaps greater long-range problem than drug abuse, is the disrespectful attitude toward law-enforcement by the impressionable people who may or may not directly violate the narcotics laws themselves. When they can successfully participate in, or observe a criminal conspiracy, or when they can choose which laws they will or will not obey, the whole structure of criminal justice is threatened. And indeed this very process, sometimes called permissiveness, sometimes cloaked under the guise of civil disobediance, is manifesting itself on campuses around the country at this time.

Away from the campuses and into the ghettos and related areas, the "hippie" and "alienated" youth thrive on the inability of society to agree on a course of action to curb a disease which is destructive and spreading.

There is also the problem of the lack of cooperation with police by the so called "intellectual community." Very often it seems as though they share in the vicarious thrill enjoyed by other near-participants in the process of foiling the law. For some period of time many areas of so called higher learning have declared the premises off-limits for regular law-enforcement personnel, and have by their very attitude fostered a contempt for laws and law-enforcement as practiced in the community as a whole.

This selective selection of laws and process should be closely examined and where it exists, especially with the topic now in issue, Narcotics, be promptly identified and corrected.

Only through a complete agreement of law-enforcement, educators, and the public, that a problem exists which cannot be corrected by any one segment, can the whole area be identified. After we have identified and classified the problems, determined objectives, and what people are necessary to implement the processes, based on resources and constraints on hand, we can then develop criteria, examine alternatives and set up model procedures.

A periodical review and evaluation by persons or committees empowered to make adjustments or complete changes of directions should be anticipated and provided for. No police problem remains static, and a procedure or process should be sufficiently fluid to allow for movement, expansion, contraction or changing attitudes.

THE ROLE OF MENTAL HEALTH IN DRUG ABUSE CONTROL AND REHABILITATION

by: Edward P. Nolan, Ph.D.
Executive Director
Northern Rhode Island Community Mental Health Clinic
Woonsocket, Rhode Island

I. Discussion and Definitions

By the term "Mental Health" we are referring to a positive, action-oriented program of guided self knowledge and psychological liberation. Its avowed goals are consistent with the notion of "education of the WHOLE man." Therefore, this is a dynamic concept, and not a static, possibly stagnant, state of "arrival" from which no one stirs. Change is an essential integer in Mental Health. Man's innate capacity for change is its operational base.

Often the goal toward which people strive is described as a state of "adjustment," or somehow characterized by the reference term of being "adjusted." Even this notion, upon inspection and given some thought, implies constant "tinkering" or change. Therefore, at the outset of this paper, I would like to make it clear that referral of a pupil, friend, relative, or more courageously and honestly, self referral...does NOT mean that all problems which this person evidenced will cease to exist...he will be "fixed." Neither is the goal of psychotherapy to mass produce a population of similar emotional tone, feeling capacity, or reactive patterns.

One further notion which ought to be considered at this point is that only the mentally "ill" require any form of Mental Health service. It is by far the bulk of our population whose emotional life evidences "disturbances" or "deficiencies" which interfere with their freedom to "become," to realize many of their potentials, and to function effectively in their immediate life situations who can most profit by Mental Health services and can be aided and helped while still participating members of their community. Little is served by isolating a pupil until a clinic or private practitioner writes something to the effect that this person is no longer contaminated and can now resume a role in the school, home, or neighborhood. The goal of purpose ultimately in any program of services in the Mental Health area is to PREVENT serious disruption in the living experiences of the population serviced. Gerald Caplan (Prevention of Emotional Disorders in Children, Basic Books, 1961) has outlined this task at three levels:

(1) PRIMARY Prevention: the lowering of the risk of mental disorder in a population of children by interfering with pathogenic forces within the children and in their biologic, psychologic and social environment before the appearance of any identifiable pathology...

(2) SECONDARY Prevention: the prevention of the disability of an emotional disorder through early and adequate treatment...

(3) TERTIARY Prevention: prevention of defect and invalidism through active rehabilitation efforts...

It is quite obvious from the outset that there would be little need for our concerted "crash-type" efforts of the present unless we were involved most actively with levels two and three in our student population. The fact that drugs are abused by school age children, ranging presently from age eight through Junior and Senior high school grade levels is constantly underlined by our news media, police efforts and by our children (if we listen and observe).

For reasons of our own survival, we as "responsible" adults fail to see what children show us or to hear what they are telling us. In the failure of successful communication, frustrations become of unendurable proportions, internal controls not fully developed fail, and destructive acting out behaviors become to sole means of self expression and attention-getting. Parents are understandably emotionally involved to the degree that they see only what is comforting to them, selectively screening out what is uncomfortable or disconcerting. The classroom teacher is, in some ways, in a better position to observe meaningfully and interpret more correctly the messages of the child. However, even in this relatively objective setting, the observer has biases and prejudices which interfere with clearer understandings of the child's needs.

II. Types and Ages of Drug Abusers

As I mentioned previously, there are incidents (in numbers) of the actual use of chemical substances for purposes of altering one's experimental and existential field as young as the age of eight. These children are usually the "sniffers" of airplane glue, paint thinners, gasoline, and other aromatics which contain sufficient potency to render various types of cellular and chromosomal damage to the child that his mentation is impaired, "personality" or behavioral changes which seem to defy internal controls are noted, and various other impairments of organic systems of a serious degree are noted. However, for purposes of simplification, I would like to dichotomize on the basis of experience with teenagers and young adults into two broad categories.

EXPERIMENTAL USERS:

By far, the majority of young people this writer has observed and studied over the last few years have been of better than average intellectual capacities, coming from a widely divergent pattern of socio-economic strata, and showing relatively strong capacities for responsible activity in many life areas. Yet they admit to abuse of such substances as marijuana, LSD, "Speed," MDA, etc. Many of these young people are "off" the habitual or repeated use of these substances either because they have been "busted" and are awaiting arraignment or trial, or they have drifted away from "crowd" with whom they formerly turned on. Many report that they are tired of being sick physically as a result of their practices.

Much careful research remains to be done with reference to the addictive properties of many of these substances, but to date I can find no obvious organic brain damage symptomatology in my studies of these people. The damages to self-concept are varied and range from severe guilt syndromes to no feelings of devaluation at all (as overtly expressed). However, without exception, the population referred to me are actively seeking psychotherapy as a more socially acceptable (if slower) process of "learning within." Again, without exception, the "experimenters" state that they are trying to gain self knowledge by means of the mind-expanding drugs, to "get in their own minds" to see who and what they are.

As a generalization, the bulk of the population "turning on" with drugs is composed of the middle class youngster who has difficulty articulating with adults (parents, teachers, etc.) and whose hostility demands ventilation. As Von Hoffman so cleverly condenses the dynamic factors of this phenomenon:

> "Coincidentally, it happens that these passive-agressive types, suffering from emotional constipation, are especially attracted to psychedelic chemicals..."

His terminology is particularly apt with regard to the personality structure he describes. This behavior commonly reflects hostility which the individual feels that he dare not express openly, for a variety of socio-religious reasons. It can be regarded as one expression of his resentment at failing to find gratification of his psychogenic needs in a relationship with parents initially, then "spreading" to other individuals or institutions upon which he feels overly dependent.

Through the therapeutic process-relationship, much of these tensions and frustrations can be alleviated and the individual "freed" for more effective and satisfying life experiences.

ADDICTS:

This much smaller, "hard core" group of drug abusers represents the classic "inadequate personality" syndrome in most cases. This individual is so ineffective, weak, inadaptible, inept, and super-dependent that reality is a constant source of irritation to be avoided as much as possible. While there are physiological factors of undeniable potency operative, it remains essentially true that were it not for the psychological makeup of the individual, he would not take the first step by which drugs were introduced into his physiological system. A number, of course, meet drugs at the hands of the medical profession and become physiologically addicted in this manner. However, the bulk of the "problem" population is psychologically addicted long before their first pill or injection. They have been unable to learn frustration tolerance, to brook delay in tension-reduction or need-satisfaction from infancy on. Emotionally, they remain infants, and act-out in "temper tantrums" to any conflict between their desires and impulses of the moment and the dictates of reality.

While we usually encounter the addict in "slum" conditions, he too could have had his beginnings in any social strata, but with more open warfare between the parental figures and more definite rejection of him as a person, masked by the "overgenerous" and "overpermissive" atmosphere of the home.

Hospitalization and constant close supervision after drug withdrawal treatment are prime requisites here for any hope of successful rehabilitation. Community involvement, such as Synanon, Marathon, Daytop and Phenix House programs where "character" training and concerned supervision and support of other ex-addicts is available have achieved a measure of success with such individuals which allows for their rehabilitation to the degree of self-sustaining gainful employment becomes a possibility instead of longer and longer periods of incarceration.

In summary, the adolescent and young adult are the age groups of immediate concern. But the fact seems demonstrated without evidence to the contrary that "the child is father to the man." Our treatment and rehabilitation programs are for the group now involved, but our concern for the conditions which make possible the present phenomena should logically extend to the Elementary school child as well.

III. Backgrounds to Problem and Treatment

Essentially if any form of treatment or rehabilitative effort is to succeed, it must perforce meet needs heretofore largely unsatisfied. An ancient Taoist inscription reads to the effect that if one would clear a stream which is polluted, one must begin at its source. The social upheaval of this generation has many sources, but the internal psychic conflicts which are the mainsprings of the acting out are seen to be defects in ego-concept. White (R. W. White, The Abnormal Personality, Ronald Press, 1956) outlines two sources of self-concept:

(1) the income from esteem that is received from others (initially parents, relatives, friends, teachers, etc.).

(2) ...the experience of competence based on the effectiveness of one's own activity in dealing with the environment.

Therefore, it would seem that deficient experiences in these two root areas of developmental experience must be overcome before an adequate self-concept is possible. Familiar patterns of those in most obvious trouble most often indicate a poor or even a negative interaction between the parental pairs, even though most pre-trial investigation reports note that the offender comes from "an intact home." Inconsistency of parental value systems or outright discrepancy between parentally voiced values and observed parental activity is repeatedly evidenced in psychological studies of the youth involved in experimental "turning on."

Most authorities agree that children today grow up faster physically, attain full growth earlier, reach puberty younger. In addition, our post-sputnik educational programming delivers more skills, awareness of world and local issues, and in general a higher level of educational achievement than ever before. Yet, in an age when physical, intellectual, and social maturity are being experienced at younger chronological ages, our children are being encouraged to prolong their educational experiences through the mid-twenties and to maintain themselves as economically dependent upon their parents to such an age. Little surprise is evidenced by researchers working with young adults that a second, segregated life has opened up to the older adolescent (Junior high through Senior high school levels)

Youth as a class apart is easily marked in dress, convention, music, has long been recognized by the profit making segment of our society. Goodman, Von Hoffman, are but two of those who write of the young person's conflict in a social order which has created the very necessity of such conflict. Differentiation as a growth process with its rebellion against adult standards and ideas is as old as society. The outright warfare between the generations today reflects more than a natural process. It reflects the disgust and disappointment of youth with a world order portrayed by their elders. Hence the slogan, "Tune in, Turn on, Drop out." Rather than fight the system or attempt to work for gradual change and betterment, the young feel that this is largely hopeless and instead form a subculture based on withdrawal from society as it is known and practiced by adults. Vast numbers who have experienced the subculture life have found it also to be imperfect with its own rigid "norms" and rules, with its profiteers and exploiters. Self freedom for self has become the hedonistic principle with its concomitant toll of twisted psyches and organically injured brain structures.

Dr. E. Trellis of Pittsburgh's regional Mental Health Center feels that drug abuse is much more than a physiological danger and psychological symptom set of individual needs for treatment. He regards the current scheme as an entire social protest against dualistic norms and adult indifference and outright "phoniness." In short, there is no ONE system or discipline which is the model with which to attack the drug abuse problem. Sweeping changes in thinking and attitudinal modifications by the existing social structure are required. This includes parents, school systems, legal interpretations, and big business marketing and labor activities. Religious institutions are not among the least to be viewed by the young as not viable or relavent, although many of the most serious and apparently successful efforts to "reach" youth are being spearheaded by activist clergy of all major denominations.

It seems fairly clear, then, that the problem of drug abuse is a symptom of many other problem areas subsumed by the syndromal constellation of our age... sometimes called the "age of anxiety," at others heralded as the "nuclear age." With this as background, the difficulties of defining a "treatment" program are patently obvious.

The Mental Health disciplines can offer guidelines to other people-oriented professionals. Consultation with educators, police officials, the courts, general and pediatric medicine, the clergy, and those parents who are not otherwise involved in these areas is a major contribution. Not all drug abusers will be treated per se. Not all want or will accept treatment practices. Somewhere along the closed system of interpersonal existence, they CAN be "reached." By whom matters little, as long as the individual reached has trust in and can relate to the person reaching out.

Teachers, like it or not, are in an ideal position for such a reach-out operation. They can be as effective as they will allow themselves to be. Buhler, writing for the classroom teacher, has outlined several "levels" of problems for teacher recognition and for handling either by direct action or by referral. Problem behavior which cannot be handled by direct counteraction or which cannot be understood as isolated incidents in an otherwise "normal" child should be looked at by specialized school personnel in consultation with the teacher. If the consensus seems that deeply rooted internal conflicts are the probable cause of the overt behavior, then the time has come for either consultation with the Mental Health Professionals or referral to them.

School systems in New Jersey, during the 1968-69 school year have encouraged youth guided projects at Senior High Level such as "COY" (Courage of Youth) and "SLANT" (Student League Against Narcotics Traffic). These are under the guidance of interested school personnel, and have the general scheme of group-therapy/sensitivity group activity. Adult awareness and interest in youth seem to be the major operative ingredients here. The fact that "education" is for living seems to be a rediscovery item that makes room on school premises available for the difficult and serious business maturing and unblocking efforts to mature.

IV. Controls Required and Available

Drug Abuse control is no different essentially than alcohol abuse control, tobacco (nicotine) abuse control, physical abuse control, etc. The aim of discipline as a tool is the inculcation of self-discipline. Much as Military Government Groups were sent to occupied territories towards the close and for a period after World War II, adult supervision and guidance, rules and restrictions have the goal of eventual self-government.

Internal controls (super ego, conscience, social responsibility, or what-have-you) must first be experienced as external forces and then introjected by the individual. Reasons for controls are expected as a logical antecedent to the institution of controls. Rules without reasonable bases or based on questionable premises are the first to be regarded as untenable by the becoming person. Rules based on adult "face-saving" or adult whimsy are usually tested to the breaking point as a matter of course. Dual standards are quickly uncovered and dismissed. Youth complain of being told NOT to smoke by adults whom they see smoking. They carp at being lectured about the degradations of alcohol by teachers whom they meet at restaurants having before-meal cocktails. Abolition of narcotic and other drugs is not the issue. They have a rightful and helpful place in human living requirements. Control of their use and prevention of their abuse is the issue. The two must be carefully weighed at all times and in all discussions in order that they not become confused.

Psychotherapy teaches responsibility for action. It teaches recognition of feelings as antecedents to action. It strives to eliminate the unnecessary and guilt-provoking tensions caused when the two concepts are confused in the individual's thinking. Supportive therapy, ego-therapy, logo-therapy, are a few of the techniques by which the individual is encouraged to develop responsibility, to build and exercise internal controls. Always, however, the possibility of action beyond these controls is admitted. Consequences for such action are made known in realistic terms and more often than not serve to reinforce internal controls or bolster such in moments of weakness. Control of illegal drug traffic is a police matter. Control of situations welcoming illegal drug traffic is a socio-psycho-educational concern.

What is available in abundance is a keen interest in and concern for young people by the majority of school personnel. Freedom to exhibit this resource in terms and behaviors which can be understood by the youth. There are no rules or formal policy statements which make of this interaction a skill lesson in punctuation or tri-column addition. It is a matter of feeling-level interaction which can be encouraged by mental health consultants, but not "taught" by anyone.

V. Mental Health Role

As I stated at the outset of this paper, "Mental Health" is a dynamic concept. It is a blend of principles and skills in an area of human growth and development which strives for the freedom of the individual to realize his own destiny with a minimum of hampering by internalized guilts and doubts and a minimum of conflict with the various environments in which he lives. Therefore, the role of Mental Health is multifaceted. Community consultation with active agencies is a realistic role exercise. This type of shared expertise makes for reaching the greatest numbe of individuals by the few available professionals.

Mental Health Agencies offer more traditional services also. Psychological assessment, psychiatric diagnosis, treatment, case work, counseling, are among the armamentaria employed. Because in this role, we are dealing with Secondary or Tertiary prevention problems, the numbers of individuals directly serviced is necessarily small.

Educational services are also a legitimate offering of the Mental Health professions. Promotion of better awareness and understanding of personality dynamics and survival systems is a great step toward Primary prevention goal acquisition. Related research in human behavior and social phenomena are also made available through Mental Health auspices.

In summary, the role of Mental Health in this problem is as multifaceted as the problem area and as broad and deep beyond the current emergency as the generalized needs of which Drug Abuse is only one symptom. A listing of resources available in Rhode Island to the schools and community at large follows.

VI. Mental Health Resources of Rhode Island

A. State Services

1. Mental Hygiene Service, Department of Social Welfare
   333 Grotto Avenue, Providence, Rhode Island

2. Vocational Rehabilitation Division of Department of Education
40 Fountain Street, Providence, Rhode Island

3. Rhode Island Institute of Mental Health
Howard, Rhode Island

B. Community Services

Community Mental Health Clinics located in:

1. Cranston, Rhode Island
2. East Providence, Rhode Island
3. Newport, Rhode Island
4. Pawtucket, Rhode Island
5. Providence, Rhode Island
6. Warwick, Rhode Island
7. Washington County, Rhode Island
8. Woonsocket, Rhode Island

C. Private Services

1. Providence Child Guidance Clinic
2. Governor Center, Providence
3. Guidance Associates, Providence
4. Butler Hospital, outpatient programs
5. Bradley Hospital-outpatient programs
6. Rhode Island Psychological Association (for listing of Psychologists)
7. Rhode Island Psychiatric Association (for listing of Psychiatrists)

D. Additional Services

Many of the state's general hospitals have psychiatric units or consultation services available.

SUGGESTED READINGS FOR TEACHERS

1. Brown, Claude, Manchild in the Promised Land (PAPERBACK)

2. Buhler, et al, Childhood Problems and the Teacher, Holt, 1958.

3. Donovan, Frank R., Wild Kids, Stackpole Books, 1967.

4. English and Pearson, Emotional Problems of Everyday Life, 1965 ed.

5. Goodman, Paul, Growing Up Absurd, Random House, 1960.

6. Stewart, R. S. and Workman, A. D., Children and Other People: Achieving Maturity Through Learning, Holt, 1956.

7. Von Hoffman, N., We Are the People Our Parents Warned Us Against, Quadrangle Books, 1968.

THE ROLE OF THE FAMILY COURT IN PREVENTION AND TREATMENT OF DRUG USERS

by: The Honorable Edward V. Healey, Jr.
Associate Justice of Family Court

The Family Court of Rhode Island assumes jurisdiction over all children under eighteen years of age who have violated any laws of the state or ordinances of any city or town. This includes, therefore, all violations of the laws and statutes regulating the use of drugs.

CASE No. 1. A child under eighteen is referred to the Court by some enforcement agency alleged to have used or sold drugs illegally. The Family Court authorizes a petition against said child, setting a date for a hearing to determine whether or not he is a delinquent child in need of care and assistance. At this stage of the proceedings, the court must insure that the child in question is given his legal and constitutional rights. He has a right to be represented by counsel, and, if he cannot afford to pay for such services, to have court appointed counsel. In Rhode Island the office of the Public Defender represents indigent parties. He has a right to reasonable notice as to the specific charge; to remain silent and not testify against himself; to be able to examine and cross-examine all the witnesses; to have a record of the proceedings; and to appeal an adverse decision to the Supreme Court of Rhode Island.

If, after hearing all the facts the Court determines that the child has violated the law, he is found to be a delinquent child. A hearing is then held to ascertain what should be done to assist said child. To this end the Court orders a complete mental and physical evaluation of the child. This is usually done at the Rhode Island Medical Center, Charles V. Chapin Hospital or Butler Health Center, but it may be done at any private institution qualified in this field.

Such an evaluation usually requires about thirty days and during this period the child is detained at the hospital by order of the Court. When the evaluation is completed, he is returned to Court. The results of the examination, psychiatric interviews, the physical examination, and any additional information (family history, social history, school records, etc.) that have been obtained by the investigators of the Probation Department are analyzed by the Court. Discussions and conferences are held with the parents, their attorney, interested outsiders (clergy, close relatives) and court personnel. It is the duty of the court then to determine the steps which should be undertaken to assist the subject so that his health and well-being will be fully protected. The Court must also be assured that the welfare of the general public will be protected while the rehabilitative program is being implemented.

In drug cases there are no routine dispositions, although in instances where there is medical evidence of drug dependence, long term psychiatric therapy is usually recommended. If this can be successfully accomplished on an out-patient basis, it will be done. If, however, the use of drugs is accompanied by other violent acts wherein the subject's life is in jeopardy (suicidal tendencies, direct association with narcotic suspects) or the public at large is placed in danger (subject's commission of assaults, robbery, etc.) he will be placed in a restrictive setting, usually the Rhode Island Medical Center or the Rhode Island Training School. This will be for an indeterminate time and his release will be predicated upon a favorable recommendation for release from the person in charge of said institution.

If further assistance is deemed necessary his release will be conditional. He may be placed on probation with explicit orders to stay away from certain designated people or places; he may be required to attend group therapy sessions (Marathon House, Phoenix House, Progress for Providence groups). So long as the prognosis for complete recovery is guarded, the case remains open.

The case is closed only when professional opinion feels there is no further danger either to the child or the community.

CASE No. 2. The child in the above example engages an attorney who challenges the evidence presented by the police. The Court, being required to follow the rules of evidence and to give all the constitutional rights (as enumerated above) to the accused, may accept or reject the legal challenges. If they are rejected, then the case would follow the format as explained above.

If, however, the challenges are valid and proper, the Court is constrained not to accept the evidence proffered by the police. Accordingly, the child must be acquitted. The child is allowed to go free inasmuch as the Court has no jurisdiction to make any further orders nor to impose any restrictions on his activities.

N.B. It seems incongruous to this particular Judge that a parent confronted with the horrendous fact that his child is using drugs will resist the efforts of the Court and State to assist. By presenting legal challenges to the methods used by police in obtaining the actual evidence or statements, they debar the necessary constructive assistance available to them.

Until a child becomes eighteen his case is private, his records confidential. The sole rationale of the court procedure is to assist. Drug offenders more than anybody else require this assistance. The stigma of a Family Court record pales into insignificance when matched with the fact that one's son at twenty-one or twenty-two is a confirmed heroin addict.

CASE No. 3. If a child sixteen (16) years of age or older is charged with an offense which would render said person subject to indictment if he were an adult, a judge of the Family Court, after full investigation, may waive jurisdiction and order such child held for trial under the regular procedure of the court which would have jurisdiction of such offense if committed by an adult.

This is the waiver section, so-called, which allows the Court under prescribed circumstances and promulgated rules to transfer jurisdiction of a particular case to the adult courts. Any child, so waived, is taken to the district court, arraigned and eventually his case is presented to the Grand Jury and tried in Superior Court. He is subject, upon conviction, to the same sentence as an adult.

The drug user ordinarily would not be waived unless it was evident that all previous efforts to rehabilitate him had been rejected, e.g., constant runaways from hospital, failure to seek private help although promised, continued use of drugs where it becomes apparent that only the prospect of a jail sentence will have therapeutic value.

It is more likely that the drug seller would be waived if his offenses were continued, deliberate and calculated. In such a case the welfare of the general public would take precedence over the court's concern for him individually and he would be sent to the adult courts to stand trial.

CASE No. 4. Any child who is habitually disobedient to the reasonable and lawful commands of his parent or parents, guardian or other lawful custodian may be referred to the Court as a wayward child. Under this section the parents may institute a complaint against their child and the child is brought before the Court to determine whether or not he is wayward. In order to protect the interests of the child if his position is adverse to the parents', a guardian is appointed to represent the child's interests. If the child is found to be wayward then a program of help can be inaugurated.

By these four illustrations, I hope the role of the Family Court is more apparent. All courts are inclined, in cases involving drug users to be more clinical than judicial, but the Family Court, distinctively, is mandated to use its authority to provide care and assistance for these unfortunates. Our prime goal is to rehabilitate the young offender so that he might grow and mature into a useful, respected adult citizen.

The Court can only be effective if the community resources are adequate to the task. In the field of treatment of drug abusers, we are frequently woefully inadequate, and the alarming increase in youthful offenders presents a count of fourteen who sniffed glue and 59 who used drugs, a total of 73 for the first six months of this year, as compared to 30 who sniffed glue and 66 users of drugs, a total of 99 for the year 1968, presages a multitude of problems in the near future unless a concerted effort at every level of government is immediately made.

The incidence of crimes coupled with the use of drugs is well documented, and so the general public's stake in this problem is as great as the individuals directly involved.

THE ROLE OF THE COMMUNITY LEADER IN COMBATING DRUG ABUSE

by: Charles H. Durant, III
Executive Director
Providence Human Relations Commission

Although much is known about the effects of drugs and its abuse potential, the abuser himself remains an enigma. Slum conditions, easy access to drugs, peddlers, and organized crime have all been blamed for the problem. While any of these factors make a contribution, the community leader in combating drugs must emphasize that no single cause nor single set of conditions clearly leads to drug dependency, for it occurs in all social and economic classes. The key to the riddle lies within the abuser himself. It is true that the drug dependency cannot develop without a chemical agent. Yet while millions are exposed to drugs by reason of medical need, relatively few people turn to a life of drugs. Even in metropolitan areas, where drugs may be available on street corners, only a small percentage of individuals exposed join the ranks of the abusers.

Case studies reveal that for the most part the hard-core abuser suffers from certain types of emotional instability which may or may not have been apparent prior to his initial drug abuse experience. Occasional cases may have a background (often undiagnosed) of psychiatric disorder.

Some psychiatrists have said that addicts have an inherent inability to develop meaningful interpersonal relationships. Others have said that addicts are persons who are unwilling to face the responsibility of maturity. Adolescent addicts may have suffered childhood deprivation or overprotection. Or, they simply may not be able to cope with the physical and emotional changes accompanying this period. What is extremely significant is that many addicts have their first drug experience during their teens.

Community leaders must also attempt to clarify public opinion regarding the fact that many individuals become affected by drugs between the transition from childhood to adulthood. The early and middle teens bring a loosening of family ties, a diminution of parental authority, increasing responsibility, and sexual maturing. Beset with anxiety, frustration, fear or failure, inner conflicts and doubts, the adolescent may find that amphetamine and marijuana promote conversation and friendship, barbiturates loosen inhibitions, hallucinogens heighten sensations, and narcotics provide relief and escape. Drug abuse may provide the entree to an "in group" or be a way of affirming independence by defying authority and convention.

In general, drug abuses fall into three main groups. The first group employs drugs for a specific or "situational" purpose. Examples: The student who uses amphetamine to keep awake at exam time; the housewife who uses anti-obesity pills for additional energy to get through household chores; the serviceman who uses amphetamine to keep awake while driving all night to reach home on a 72-hour pass.

The second group consists of "spree" users, usually of college or high school age. Drugs are used for "kicks" or just the experience. There may be some degree of psychological dependence, but little or no physical dependence because of the sporadic and mixed pattern of use. Drug sprees constitute a defiance of convention, an adventurous and daring experience, or a means of having fun. Unlike hard-core abusers, who often pursue their habit alone or in pairs, spree users usually take drugs only in groups or social situations.

The third is the "hard-core" addict. His activities revolve almost entirely around drug experiences and securing supplies. He exhibits strong psychological dependence on the drug, often reinforced by physical dependence when certain drugs are being used. Typically, the hard-core addict begins drug abuse on a spree basis. He has been on drugs for some time and presently feels that he cannot function without drug support.

With what has already been said serving as background, the next obvious question the community leader must ask is what does he and the local citizenry do once drug usage has been identified. The proper answer to this question is of vital concern to the local community and should begin with the request of help from the appropriate investigative, medical, and legal staff authorities.

Due to the inherent complexity of drug abuse, including the fundamental difficulty of being certain that drug abuse even exists, community leaders must be concerned with the roles they play even after a suspicion is confirmed. This, depending on the situation, can involve ongoing counseling help with rehabilitation, continuing rapport with law enforcement agencies, and a need to determine if more than one person is affected. Although the responsibilities in these areas will vary from situation to situation, and therefore cannot be individually delineated here, everyone concerned should be familiar with the broad concepts of action in drug situations.

Unusual, but most critical, is the emergency situation. In a case of unconsciousness, which may be drug-induced, rapid help is vitally important. Emergency medical aid should be summoned immediately. If breathing fails, some form of artificial respiration should be administered until medical help arrives.

The more usual situation is one in which the suspicion of drug abuse is aroused because of a person's behavior. The immediate problem at such times is to determine whether the person is abusing drugs, or if he is acting peculiarly because of some condition not related to drug abuse. In this situation, medical help must be obtained, for a thorough examination is the only method of positive identification of drug abuse.

Because of the "contagious" nature of drug abuse, every effort should be made to determine the names of other persons who may be abusing drugs. Experience in this area has shown that drug abusers attempt to pass their habit to friends and associates in order to raise money. For this reason, the drug abusers must be identified to help avoid the spread of drug abuse. The frequently made claim that drug peddlers start innocent persons on drugs is usually contrary to the fact.

A person who has been abusing drugs will probably need special guidance and extra emotional support. Accordingly, extraordinary efforts may be required to help him overcome his problem and remain an effective part of community life. Eventually, of course, the drug abuser may have to be referred to a special institution specifically equipped to handle such problems.

In conclusion, drug abuse prevention can be practiced effectively by knowledgeable community leadership. Basic to the success of any drug abuse prevention program is an honest approach concerning the dangers of the problem. Learning should be informative and factual. Sermonizing must be avoided. The facts concerning the effects of drug abuse are the first steps toward enlightenment and mature behavioral judgements which are necessary for developing a sound educational campaign.

THE ROLE OF THE SCHOOL NURSE IN DRUG ABUSE CONTROL

by: Helen M. Otto, R.N.
School Nurse
East Providence Senior High School

The educational system is called upon to assist in combatting the problem of drug abuse, a highly charged emotional area. School health encompasses the team approach to health care of the child. A very important responsibility is the coordinated effort of the educational personnel, the community agencies and the medical personnel to promote individual and group health programs.

The primary function of the school nurse is to strengthen the educational process through improvement of the health status of children and youth. She is the pivot of a triangle in which she works with the child in the school, from the school to the home, from the home into the community. The nurse makes a unique contribution to the school health team because she is prepared to think in terms of family interaction. At times the nurse is the only member of the team who knows the home situation, and she has knowledge of community resources and programs. Her approach is family-centered and she can contribute to strengthening an entire family, which, in turn influences a community's well-being. Traditionally, the nurse is seen as a non-threatening or less authoritative member of the health team; consequently, she can be used as a confidante for the student. Her knowledge of the signs and the symptoms of drug abuse may not be so important as her attitude when confronted with an irate teacher, distressed parent, or a drug-suspected student. Basic attitudes toward others are revealed by voice tone, touch of hands, body posture, facial expressions. If the school nurse is to succeed in her education of others, each person must be accepted as worthwhile and treated with respect. The nurse may not approve of another individual's way of life, his behavior, his actions and reactions, but because he is human he is treated with dignity. Treating one with dignity is at times difficult when the individual has limited ability and has less opportunity or advantage. Gentleness is more rewarding than arrogance when dealing with those who are not admired or respected. It must be remembered that the individual is loved by someone.

Causative factors of drug abuse are varied. No one can deny the youngster the rights of television where he has grown up with the solution to many problems by buying the advertised product. He is living in a drug oriented society where statistics report over sixty percent of the prescriptions written are psychoactive in effect. Energize, tranquilize, stimulate are not the physical pain relievers formerly prescribed. To eliminate pain and discomfort is understandable, but the adolescent's desire for new experiences, insight into one's psyche, or an act of rebellion against authority is the reason drugs have become abused.

Literature reveals that positive rather than negative values should be related to drugs by differentiating between "drugs" and "medicine." Drugs are useful compared to alcohol and tobacco which are oral pleasures. State regulations require the teaching curriculum to include smoking, alcohol, and narcotics. Smoking had been a lost cause up to the present time. Private health agencies (heart, tuberculosis, cancer) joined forces under the National Council on Smoking. The harmful effects and presentation of facts on smoking brought about a decrease in national statistics in the adolescent and adult population of smokers. Many young people were and are involved in the campaign to prevent and stop smoking by presenting programs to junior high and elementary grade students. "Student involvement" is the desire and "tell us the facts" is the demand from youngsters rather than fear tactics and exaggerated stories which proved ineffective in the past.

The nurse's role in helping to control drug abuse is to be involved with faculty, student, family, and community. Prevention and education take priority in setting the curriculum. The nurse as a member of the educational team can make her contribution by supplying resource material and acting as a consultant to the teacher. Emphasizing the positive value of drugs rather than the negative may orient students to the real problem. The problem for the student is living, learning and growing in an environment where change is constant and the future unpredictable. To many educators and others deeply concerned with young people, the problem is not to stop drugs but to promote a climate where the student can explore his feelings, promote self awareness and question the rules and regulations set by society.

The nurse is available for counseling, guiding and teaching for individual children and for families. She is an interpreter of the health needs of the student to the educational personnel and community and an active participant in community programs. The problems of youth call for the nurse's skills, interest, and understanding. Personal job satisfaction and a sense of accomplishment in her role as nurse in the educational setting is provided as she participates in the total development of the child.

A POLICE OFFICER LOOKS AT THE DRUG PROBLEM

by: Captain Robert E. Ricci
Providence Police Department

Drug abuse has been with us since ancient times. Its seriousness has increased with the passing years until the present time and it has become a major problem for law enforcement officials. The law enforcement official whether he be local, state or federal in his investigations deals not only with the so-called "hard core" addicts but many other persons in all walks of life most of whom are in it for the "kicks" they may get out of the use of the various drugs.

Although much is known to police officers about the effects of drugs on persons the user himself is difficult to understand. Slum areas, access to drugs, sellers of drugs have all been blamed for the problem. Lack of control and guidance by parents is a major cause when drug abuse occurs in the middle and higher class areas. Vice officers working in the slum areas of the city are more apt to find the use of heroin and morphine dependence among the teen age element greater than in the higher income areas. It has been found over the past ten years of narcotic investigation in the City of Providence that generally speaking drug users fall into two main groups.

The first group is the users for "kicks," those trying to get a "high" or "low" or the user for the experience. There may be a small degree of psychological dependency but little or no physical dependency. Unlike the hard core user the person taking drugs for "Highs" or "Lows" usually takes his drugs only in groups or in social situations. They come to the attention of the police official through complaints, information from neighbors, parents, and at times from persons within the group. A majority of the arrests that have been made by law enforcement officials have been made by the use of undercover officers who buy drugs from sellers or by an informant who will buy drugs and testify in court against the seller. From our records within the Providence Police Department, we have found that some of the users in the first group have gone on to the use of addicting drugs. This information is usually obtained from the person arrested. In addition, there is usually some physical signs that the subject has used drugs by injection.

The second group of persons consists of the "hard core" addict. His activities include the entire spectrum of drugs from using to selling. This group of drug users has a strong psychological dependency on drugs and more importantly an almost uncontrollable physical dependency on them. In order to pay for the drugs they use, the vast majority turn to various criminal activities such as larceny of articles from autos, breaking and entering into business places for cash and items that may be sold or females resorting to prostitution on the streets of the city. One only has to drive in certain areas of the City to see females walking the streets for the purpose of prostitution, seeking the money to sustain their drug habit.

Repeated arrests of these subjects for offenses have not solved the original problem of their drug addiction. It is generally felt by law enforcement officials that an educational program would be a strong preventive measure of solving the problem of drug usage and addiction. As stated in the report by the Commission to Study Drug Addiction dated April, 1968, "It is generally acknowledged that preventive measures are the most productive means of solving the problem of drug abuse and drug addiction. They should be based on sound factual knowledge and should include the medical, legal, social, economic, and educational factors in the causes, prevention and treatment of drug abuse and drug addiction among adults and teenagers."

It is my opinion that along with such an educational program that is now taking shape here in the State of Rhode Island important attention must be given to the role of the law enforcement official as a deterrent factor in controlling drug abuse. For regardless of any controversy over any type of drug, once the law has been established, and until such law is held to be unconstitutional, the main concern of any law enforcement official is the strong enforcement of said laws as a deterrent against a seller or a user of drugs. It is my opinion that the various laws and the penalties that a convicted person may receive must be strongly brought to the attention of the students. Not only the fact of being convicted and possibly receiving a prison sentence but the meaning of a police record when a person enters the adult world for employment.

Civil commitment for rehabilitative purposes has proven over the years to be a start in helping the drug user understand himself and his problem, but commitment is not the entire answer. For while the drug user is under commitment his odds of using drugs are nil but once released and facing the return to the same environment from whence he came he invariably returns to the use of drugs. Over and over again this has been the case in the City of Providence.

Mr. Edward P. Gallogly, United States Attorney, was quoted in The Evening Bulletin, January 27, 1968, in an article regarding the new Federal Narcotics Program as saying that he was going to stop sending "hard core addicts" to the National Institute of Mental Health, Clinical Research Center at Lexington, Kentucky, because three out of four addicts who had been committed under a court procedure a month prior and who after examination by Federal officers were classified as "not likely to be rehabilitated by treatment." This statement by officials whose knowledge and training in the handling of persons addicted to drugs once again points out the extreme danger people face in taking drugs illegally.

It is my belief that the teachers who will teach about narcotics and drug abuse must have a complete understanding of the drug problem. In order to be effective they must have knowledge of the drug use in their own cities and towns to see for themselves the terrible dangers and results from the use of drugs.

In teaching about narcotics, and drug abuse, scare and fear techniques should be avoided but students should see what involvement can mean. One informative, personal contact kind of program has been tried in Boston. The city of Boston has developed a program which utilizes the cooperation of the Boston Police Department, the Boston School Department and the prison officials of the Norfolk Prison. Students are transported to Norfolk Prison where prisoners talk to the students about personal experiences with drug involvement. Students are able to see and talk with persons who have been confined through their use and sale of drugs. This is one way students can see the results of drug abuse and make judgements for themselves.

WHAT IS A DRUG?

by: Dr. John J. DeFeo
Professor of Pharmacology
University of Rhode Island

When the word "drug" is mentioned, it seldom evokes a single uniform definition in the mind of all people who hear it. In fact, the word very often conjures all sorts of definitions, from the "miraculous" on the one hand to "tools of the devil" on the other. It is logically contradictory to hold that anything could be simultaneously both good and evil.

Since man began his life on earth he has been subject to disease and death. No doubt he sought materials that would help him overcome various diseases, wounds, infections, etc. We have both direct and indirect medical evidence from all parts of the world that testify to his empirical medical practices. We know that even the most primitive cultures relied on centuries-old knowledge of the use of many substances for alleviation of disease. We have records from Egypt from the 16th century B.C. (Ebers papyrus) indicating quite a sophisticated development of the use of various formulae and prescriptions. Some of the ingredients are still in use today, i.e., castor oil, turpentine, opium, aloes, salt and copper sulfate. Other fascinating items were swine's teeth, stinking fat, goose grease, and moss grown on human skulls. The Greeks, and later the Arabs, made significant contributions to the drug lore of medical practice. It is well known that the scientists and philosophers of these eras experimented on an empirical basis and interestingly enough, they achieved some therapeutic success.

In order to better understand why and how drugs can be used, let us turn to a brief explanation of certain principles of drug action.

We designate those substances used in medicine as drugs. Drug is probably derived from the French Drogue, meaning dry herb. A good definition of a drug would be: a substance used in the prevention, diagnosis, treatment or cure of disease in man or animals. This limits drugs to therapeutic usage. To a pharmacologist a drug would be defined as any chemical stimulus producing a response in living organisms. The latter definition covers a rather broad area, and does not limit drugs to therapeutic use only.

If drugs were used exclusively for the treatment of disease we would avoid many problems. Also, if drugs were effective only as therapeutic agents no one would have use for them unless they were ill. However, drugs are rather amazing in their ability to produce effects both on normal and diseased cells.

We know that the living body functions through chemical reactions. Digestion, muscle activity, circulation of the blood, use of energy and brain activity, for instance, are all dependent on various specific biochemical reactions. Some of the reactions are well known, some are not. Because chemical reactions are basic to the body's activities, any interference with these reactions can cause various cells, tissues, and organs to react in a way that can be beneficial or potentially harmful to the organism. In fact, those chemical agents that we introduce into living systems that produce some effect, are doing so by interacting in some way with the body's biochemical systems. When we learn how to control the effects of some of the chemicals, and we find that they can be used to treat a particular disease state, we then employ them therapeutically. Many chemicals are known to produce effects on the normal physiology but do not have any particular use in the treatment of disease.

In most cases drugs produce both physiological as well as therapeutic effects. We must also realize that because the body's functions are integrated, the effect on one chemical mechanism may result in effects on other systems. It is also known that some chemical agents may interact with several biochemical systems. Thus we are not always able to confine the effects of a particular drug to a specific system. Most of the drugs we use today can produce several effects beside the one for which the drug is actually indicated.

It should be noted at this time that all drugs can produce toxic effects varying from mild reactions to very serious physiological disturbance. These usually vary according to dose, duration of use and responsiveness of a particular person.

An important factor that relates to drug abuse, is that certain drugs can create a psychological as well as physiological need and dependence. Here we encounter the terms habituation and addiction. A habit is something that is relatively easier to change than addiction because it involves a psychological desire mostly. In a true addiction, not only the desire, but the actual need for the drug takes control of the body. The drug becomes part of the physiological system which then creates a demand for the drug which is primarily manifested by effects on the C.N.S.

In order to terminate an addiction, the person undergoes a relative period of unpleasant, powerful, physiological changes as the body attempts to return to its normal level of activity. Thankfully, many of our most useful drugs do not produce addiction.

Finally it should be emphasized that although we can describe what can and may happen when a drug is administered, the end result is very often dependent on the physiological condition of the patient or user. This results in degrees of activity that can vary significantly from one person to another.

These facts concerning drug action may help you understand some of the reasons why there are certain problems in the use of drugs, i.e., why drugs that can produce desirable effects can produce undesirable and dangerous effects when used improperly due to misinformation or lack of proper knowledge.

THE ROLE OF THE SCHOOL ADMINISTRATOR IN DRUG ABUSE CONTROL

by: Ian Malcolm
President
Rhode Island Association of
School Superintendents

The most important role of the Administrator in the control of drug abuse is to recognize openly and honestly the true proportions of the problem. Somewhere between the claims that every teenager is experimenting with pot and the categorical denial that a problem could ever exist "here in our town" lies the field on which this battle must be fought. The problem is here. Narcotics are as readily available as the family medicine chest, and experimentation among young people is to be expected. Thus the Administrator must first accept, without being defensive, the fact that there is a problem that proper educational programs could ameliorate, and he must do what he can to prevent the hysteria and panic that usually accompanies this problem and makes objectivity so difficult.

But this is more than a school problem or one that will be resolved by education alone. The school administration must be prepared to work cooperatively with the courts, the law enforcement agencies, the board of health, the mental health organizations, the social welfare agencies, and the churches, to name a few; and he must seek out other concerned institutions, agencies and individuals so that all available resources can be brought to bear upon this problem. In some communities the school administration might have to initiate a concerted attack by all appropriate institutions and agencies and coordinate the attack. In other communities, where the initiative has already been taken by another agency, it must be prepared to cooperate by bringing the resources of the school personnel and program to bear. It is worth the redundancy involved to repeat that the school is not the only institution capable of education; nor is education--indispensable though it may be--the only weapon that can be employed. Treatment, probation, restraint--and even confinement in certain cases--all have roles to play. To be effective, the schools must work cooperatively with the home, the police, the courts, the youth-serving agencies, the doctor, and the clinic.

And then the administration must play its other role. It must create an atmosphere in which all school personnel are willing and anxious to work on this problem, and it must provide the leadership essential to this effort. The administration should encourage the in-service training of all school personnel and, when appropriate, design, organize or coordinate programs for the in-service training of school personnel. The administration should then authorize and encourage a complete review of the curriculum to see where and how education relating to drug abuse could be so effectively presented as to modify the behavior of students through a comprehensive health program from kindergarten through high school, because changing behavior is a lengthy process, and if behavior isn't modified, it isn't education. And, too, this curriculum review must include the social studies, the sciences, physical education and other subjects so as to assure reinforcement of that which is learned in the comprehensive, sequential health program.

Most important, the administration must remember that if this program is the product of a single individual, no matter how competent that individual is, it is doomed. It must, instead, reflect the combined strengths not only of all concerned teachers but of the nurse, the psychologist, the social worker and the guidance counselor as well.

APPENDIX D

RHODE ISLAND STUDENTS VIEW DRUG ABUSE

The following three articles are winning essays written by students in Rhode Island Schools. The statewide contest was sponsored jointly by the Exchange Club of Providence and the Attorney General, Herbert F. DeSimone.

What is Drug Abuse?

Carolyn Yacavone	Age: 17
East Providence High School	Grade: 12

That first consumption or use of a drug other than for medicinal purposes is drug abuse; it can only lead to trouble. "Everybody else at the party was doing it, so I didn't want to look like a fool." Sounds familiar. However, some of the "nicest" kids from the "nicest" families in the "nicest" neighborhoods are helplessly hooked on drugs. I suppose it seems harmless enough at the beginning, but many times this initial action is deeply regretted in later years.

One of the most imminent dangers as a result of the use of drugs is damage to one's health. The Central Nervous System is affected; so, too, are many other organs which operate in conjunction with the nervous system. Man's most precious possession, his mind, often becomes his worst enemy while under the influence of drugs. Apparitions, usually frightening, taunt the individual; objects become distorted. Even brain damage can result from repeated use of these drugs.

Many say that certain drugs are perfectly all right to use because they are not habit-forming. This, I believe, is a fallacy; if candy can become habit-forming to a person, which it is to some people, certainly drugs are apt to do the same, if not have a worse effect. The drug becomes as a crutch to the person who can't live without it. Also, drugs serve as a means of escape for many individuals who aren't mentally mature enough to face reality. Maybe drugs aren't actually a means of escape, but the person using them believes this. What a poor state of mind in which to exist! Drugs destroy one's sense of perception as well as destroy great potential in some individuals.

Drugs play a distinct role in the disintegration of family life. Once one is hooked on drugs, it becomes difficult to hold any type of position; however, money is essential to keep a supply of drugs on hand. This situation leads to stealing and cheating. The children of a drug abuser are often underprivileged due to a lack of money, a lack of education, the lack of a healthy environment, and the lack of love. A family situation such as the one described would often lead to divorce.

In addition to having a bad effect on the individual and the family, the drug abuser has a bad effect upon the state. It is the drug abuser who is involved in many of the automobile accidents in which many innocent people lose their lives, but, worse than that, it is the drug abuser who commits many of the crimes prevalent in our society today.

A great problem confronted by the state officials today is what to do with the drug abusers who do come under their control. There are different hospitals and clinics where corrective methods are employed on these drug abusers. Some come out of such care centers cured, but most walk out of those hospital doors merely to begin that wretched life all over again.

You see, all of this hardship and trouble could have been avoided had it not been for that initial use of drugs. It seems odd to classify the first such use of a drug as abuse, but I feel that if it weren't for that first slip, an individual wouldn't fall into such a horrible existence. Life is wonderful - why not keep it this way?

What is Drug Abuse?

JoAnna Kubaska	Age:	16
St. Clare High School	Grade:	10

Headache? Take a pill. Depressed, tense? Take a pill. From an upset stomach to an upset psyche, there is an almost mystical faith in the power of drugs to heal, to ease pain, to tranquilize and to help people to 'escape' from the realities and responsibilities of life. Millions of Americans take pills on their own or on their doctors' say-so every day, so that we are consuming tons of drugs at a cost of nearly five billion dollars each year.

Now we are beginning to wonder about America's, and the world's, pill mania. We see a common epidemic on the horizon. An epidemic of pill-caused diseases, both mental and physical. We see death. And we look with horror at the many, many people who demand, and, unfortunately, somehow obtain unneeded and dangerous drugs. We constantly worry that those pills which were meant to be lifesavers may lose their power through indiscriminate use.

It is true that an obvious result of all this pill-taking has been the alleviation of much suffering and the saving of many lives. For before, the renowned physician and author, Oliver Wendell Holmes, stated that if the drugs of his time could be sunk to the bottom of the sea "it would be all the better for mankind - all the worse for the fishes." Yet, at the present time, when the dangers of physically addicting drugs are readily known, how many are turning to amphetamines to pep them up, barbiturates to calm them down and hallucinogens to turn them on?

The most popular was marijuana, now no longer a drug that is used only among "low-income groups." Pot has found its way into high schools, the suburbs, college dormitories and even into the military services. The drug isn't "safe" simply because it is not physically addictive. It has been found, after two years of studying and experimenting, that even weak preparations can cause anti-social behavior, while in strong doses delusions and hallucinations are found in most subjects.

Then there is the case of LSD, the new "darling" of the pill set, the famed producer of fantastic visions. Yet how does one go about persuading another to believe that significant numbers of young people actually do not return from these trips? Severe mental breakdown may occur instead, - sometimes to the point of suicide. Panic, confusion and delirium, followed by depression and fatigue, are the unfortunate states in which one finds himself after completing his trip. The sad part is, most addicts are aware of these and other dangers even before they begin, but the free will of an individual, try as we may, cannot be forced to change.

We often ask ourselves why it is that individuals can indulge in something so fanatically dangerous. Several reasons exist, especially since the drug may produce pleasing effects on some people. They may seem to relieve fears and worries and cause feelings of extreme happiness for a time. However, as many begin experimenting with drugs in their teens, just because a friend does so, it may soon play the role of leading the person to the "harder stuff," such as the true narcotic, heroin.

The drug addict soon loses his ability to act quickly and correctly. He is harmed in both mind and body and visions frequently occur in which he may imagine that he is being persecuted by enemies. His main ambition is to obtain more drugs, so that he becomes an unreliable worker and poor parent. Many turn to crime, develop poor hygiene and later serious diseases. Their irresponsibility and lack of decency prevent them from fulfilling duties to society. When we think of the overwhelming number of drug addicts in the world today, we wonder: Are these to be among the leaders, citizens and examples of the future generations?

If we cannot stop them ourselves, we may only hope that they may someday develop the sense to stop themselves. The true story of a seventeen-year-old boy who carried his younger sister in to have sex relations with another man because he needed a fix of dope so badly will keep me away from drugs for the rest of my life. (She was too ill and weak to walk in herself.)

Yes, we realize that while modern chemistry and biology have produced a magnificent array of lifesaving and pain-alleviating chemicals, today the vast majority are overused, and abused. If we wish to retain their power to do good, we must drastically cut their power to do harm. We have only to thank God that a start on that problem has now been made.

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What is Drug Abuse?

Arnold Kirshenbaum — Age: 15
Cranston High School East — Grade: 10

How could it have happened here... I still don't believe it, not in our community. What did we do wrong? Could we have stopped it from the very beginning?

"It" is drug-abuse. The words are those of civic leaders and parents whose awareness of drug-abuse in their community has just been awakened.

Drug-abuse presents two major problems: legal and medical. Those who are advocating the legal use of drugs claim it is as logical as is legal use of alcohol. Is this true?

The only reason for such prohibition of drugs is that drugs, authorities fear, are not in the hands of mature, self-disciplined adults, as everyone claims. More drugs today are being used by adolescents than by any other group, and no group can abuse drugs more easily than they. Drug-abuse, therefore, is the using of drugs by a person whose state of health has been warped by an overuse of drugs. People use drugs in order to feel above the average, normal, daily routine of life. But this craving for a "different" feeling can result in a permanent mental problem.

Can these drugs be categorized? Yes, there are four types: hallucinogens like LSD; stimulants, like cocaine; depressants or sedatives like amatyl and Miltown; and narcotics like heroin and opium. The most threatening drug is heroin. If this drug is used in an overdose, it can cause permanent mental disorders to its addicts.

There is no common type of drug abuser. Most drug abusers fall into categories between one-time experimenters with drugs and those who use one drug for one purpose and other drugs for other purposes. Drug use seldom happens in social solitude. The newer values placed on drug addiction range from attainment of adventure and sincerity to close personal relations and individualism. One element that contributes to drug use by the older generation is the emphasis on immediate pleasure. In general, both generations place as their inspiration, their craving for sexual freedom.

The drug conflict stems from one major inconsistency. Drug affiliates desire immediate pleasure and idealism but run into difficulty, realizing their desires for self-understanding and sociability. They dislike phoniness and attend LSD sessions in order that they may understand society and their own selves.

Those parents who drink alcohol themselves do not help their children in the least. College students who use LSD and marijuana are beyond the reach of these parents. And now there is sufficient evidence to prove that high school students, as well as college students, are taking LSD "trips" and pep pills.

Those 10-15 year-olds who are presently "glue-sniffers," later tend to want more powerful mind-warpers and eventually locate a source of ready, available drugs. Glue may not be a true drug or cause addiction, but those who sniff glue risk suffocation and damage to internal organs. Severe medical consequences can result from such inhaling of fumes.

Why drug-abuse? Theories offering explanations for addiction have narrowed down drug dependence on three conditions: 1. Availability of the drug and means to use it; 2. Social pressure, and support by a subgroup of addicts; 3. Need on the part of the victim that makes him liable to the promise of relief through use of the drug.

In combating drug-abuse public health authorities realize attempts to frighten students or to exaggerate the effects of drugs simply will not work on today's youth. Dr. David E. Smith, Director of the Alcohol and Drug Abuse Screening Unit at San Francisco General Hospital remarks, "Using drug misinformation to scare young people actually increases their drug experimentation because they feel they must find out the truth firsthand."

The best way to curb drug abuse is to have evidence of the effects of drugs made available to students. Several ways would be to give lectures, have speakers tell their experiences, or create a society where young people can come to discuss freely drugs and how to prevent their abuse. (the "awareness house" at Fort Bragg is a very good example of such an endeavor). An example of drug-abuse is a 16 year-old boy who experimented with morning glory seeds after having read about hallucinogens. The effects of this dose were startling. The boy began to address nonexistent people and animals. He was immediately given treatment; and after the effects went away, he was so shaken that he never wanted another drug again.

The more LSD and other hallucinogens are freely discussed, the less attractive they will seem. Those who want to help must not object to discussing drug-abuse with students and must sincerely want to guide these individuals in the right way.

We have hope for these drug-abusers. Since scientists are showing a great interest in drugs which affect the mind, the understanding of mental processes may be soon fully known. But research does not lie in interplanetary space. It lies in the human brain, sometimes referred to as "organ of final cause." Man has risen to dominance among his fellow living creatures of the life pyramid by using this organ. By misusing it, he might well destroy himself and all living things as well. Maturity must be reached by use of the brain before mankind destroys himself.

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APPENDIX E

PERTINENT RESOURCE MATERIALS

Dependence on Amphetamines and Other Stimulant Drugs

Stimulant drugs of the amphetamine type have been used in medical practice for the past 35 years. During this period identifiable patterns of abuse and misuse have been established, and it has been demonstrated that, for many persons, these substances have dependence-producing* characteristics which can bring about serious clinical and personal problems. However, unlike that with narcotics or barbiturates, over-medication with stimulants does not lead to physical dependence. Abuse of these substances arises from and is perpetuated solely by psychic needs to overcome depression or fatigue or to attain the euphoric and excitatory effects associated with the drugs.

The routes to dependence on stimulant drugs are varied. Some start in the physician's office where a prescription for amphetamine is given as treatment for depression or as an adjunct to weight reduction. Most cases, however, stem from illicit channels where drugs are sold indiscriminately to a variety of customers, such as truck drivers who want to stay awake during long hauls or teenagers and young adults looking for "kicks."

The actual incidence and prevalence of cases of drug dependence of the amphetamine type are unknown. Clinical experience in the United States and other countries indicates an increase in amphetamine abuse, ie, unsupervised self-administration. It also has become increasingly clear that many physicians have not fully appreciated the inherent dangers in prescribing these medications, and that in many cases their presumably therapeutic actions can constitute misuse of the drugs.

The degree to which the abuse of stimulant drugs stems from over-prescribing or from black market sales is not known. However, the problem is serious enough to warrant the concern of the medical profession and an examination of the use, misuse, and abuse of the stimulants. In this communication "use" refers to the proper place of stimulants in medical practice; "misuse" applies to the physician's role in initiating a potentially dangerous course of therapy; and "abuse" refers to the self-administration of these drugs, without medical supervision and particularly in large doses, that may lead to psychological dependence, tolerance, and abnormal behavior.

Historical Note

The main stimulant drugs are amphetamine and methamphetamine. Both were synthesized in the 1920's as part of the search for a substitute for ephedrine. The first clinical use of amphetamine was as a vasopressor, by Piness et al, in 1930. As a generic class of drugs, the amphetamines have certain pharmacological properties in common with other sympathomimetic or adrenergic drugs, such as epinephrine and other catecholamines and their effect on the autonomic nervous system, cardiovascular system, and smooth muscle. The amphetamines, however, have a much greater capacity for stimulation of the central nervous system. With small doses of amphetamines, this stimulation is limited to elevation of mood and the induction of a state of "well-being." As the dosage is increased, apprehension, volubility, tremor, and excitement occur.

It soon became apparent that the amphetamines were effective in retarding fatigue-induced deterioration in psychomotor performance and that, under medical supervision, they had some appropriate use for persons required to do routine tasks for prolonged periods under adverse circumstances. For example, under medical supervision, amphetamine was administered to an orbiting astronaut prior to reentry.

It was also noted that these drugs allayed the sensation of hunger and they have been prescribed for weight reduction of obese persons. During the past 15 years, a number of amphetamine-like substances have been marketed as anorexiants. These drugs also stimulate the central nervous system to varying degrees and therefore have a potential for psychic disturbance and dependence.

Amphetamine-type drugs were in widespread use before their dependence-producing properties were recognized. However, their ability to cause euphoria, dysphoria, and psychic stimulation did lead to the removal of amphetamine from over-

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This statement was prepared by the AMA Committee on Alcoholism and Addiction, reviewed by the Council on Drugs, and approved by the Council on Mental Health.

*Dependence has been used here to replace "addiction" in conformity with recent action of the Expert Committee of the World Health Organization.

the-counter nasal inhalers. Restricting the legal acquisition of stimulants to prescription medications did not, however, put an end to their misuse or abuse; today these drugs are part of a major medical and social problem.

The United States is not the only nation so affected. In the late 1940's and early 1950's, Japan had a major outbreak of abuse of stimulants. At the onset, amphetamines were available on a nonprescription basis. It is estimated that in the peak year of the stimulant epidemic, between 500,000 and 1 million persons, including many teen-agers, were regular abusers. During that period, many cases of toxic psychosis were reported, and in one year, 1954, Japanese police arrested 55,000 abusers of amphetamines. In that same year, strong amphetamine-control laws were passed. However, the episode conditioned a pattern of drug abuse in Japan that continues today. Other stimulants, still outside legal controls, are being widely abused, and there has also been a marked increase in the abuse of central nervous system depressants and heroin.

Great Britain also has a serious problem involving the abuse of dextroamphetamine, primarily of a tablet containing dextroamphetamine and amobarbital. At one time, the chief abusers were women in the age range of 35 to 50 years who initially received the drug for weight control. Today, an alarming number of younger persons are reported to be abusing stimulants.

In 1965, concern in the United States about the growing problems of drug dependence and abuse led to the passage of legislation, supported by the American Medical Association, that gives the Food and Drug Administration authority to control the manufacture and distribution of substances having a potential for abuse, ie, stimulants, depressants, and hallucinogens. The Drug Abuse Control Amendments of 1965 require that detailed records be kept on the manufacture, shipment, and distribution (including pharmacy prescription records) of the drugs covered. This law should be useful in reducing the amount of these drugs diverted to illicit channels. Amphetamine-type drugs are also illegally synthesized for distribution on the black market, and this traffic will be difficult to control.

The law also stipulates that a prescription for a stimulant or depressant drug under control is valid only for six months and, in that time, is limited to five refills. However, misuse is still possible within these limits.

Definition of the Problem

Stimulant Production in the United States

A survey by the Food and Drug Administration indicated that, in 1962, over 100,000 lb of amphetamine and methamphetamine products were available in the United States. The amount in this one-year inventory is enough to supply 250 mg of these stimulants to every man, woman, and child in the country, ie, 25 to 50 doses per person.

Use and Misuse of Stimulants

Amphetamine and amphetamine-type drugs are prescribed in medical practice to

(1) Control the symptoms of narcolepsy.
(2) Control certain hyperkinetic behavioral disorders of children.
(3) Relieve or prevent fatigue in individuals with deteriorated psychomotor performance.
(4) Treat mild depression.
(5) Antagonize the pharmacological actions of depressant drugs (eg, barbiturates, alcohol).
(6) Control appetite.
(7) Induce insomnia and counteract fatigue in persons occasionally required to perform mental or physical tasks of long duration.
(8) Enhance the action of analgesic drugs.

With the exception of the first two items, the indications for the proper medical use of stimulants are subject to varying degrees of professional controversy. The debate, waged on both scientific and ethical grounds, is focused on the efficacy of these drugs as well as on the hazards involved in initiating a treatment regimen that, in susceptible individuals, can result in the development of psychic dependence and tolerance. It should be recognized that, with the exception of Items 3, 5, and 7, stimulants are currently used in treatment programs often involving long-term, continuous medication. If medical use is not to become medical misuse, any such program necessitates careful evaluation and supervision of the patient; control of the dose; and being certain that other physicians are not prescribing amphetamine-type drugs for the same patient.

When used as anorexiants, the amphetamine-type substances apparently help some individuals curb their food intake for short periods. However, in long-term (more than a few weeks) programs of weight reduction, the superiority of these substances to placebo has not been demonstrated. Particular scrutiny should be given to patients who request amphetamine-type drugs for weight control.

Amphetamines appear to be effective for some persons as part of the treatment of acute situational reactions with symptoms of mild depression. However, it is considered poor medical practice to administer stimulants without simultaneously instituting other therapeutic efforts aimed at alleviating the underlying emotional disorder. Published studies have indicated that, in general, dextroamphetamine is only slightly more effective than a placebo in ameliorating depressive symptoms.

The use of stimulants to antagonize drug-induced depression in acute poisoning may be proper. However, the prolonged administration of stimulants to alcohol- and barbiturate-dependent persons is not proper, since this permits the patient to take increasing amounts of depressant drugs—a practice which can result in mental and physical deterioration. Also hazardous is the regular use of amphetamines to counteract the "hangover" effects of excessive alcohol or barbiturates. In fact, the use of amphetamine-type drugs is contraindicated for alcoholic persons and other dependence-prone persons.

When a physician prescribes stimulants, he should do so for a limited time and for a specific purpose. He must also assume responsibility for frequent reassessment to ascertain whether the drug is effective. If the desired results are not being attained, medication should be discontinued. The dosage should be substantially reduced or stopped if a patient shows signs of agitation or tension. Prescriptions should be written for the smallest possible amount of stimulant needed. The prescription controls imposed by the Drug Abuse Control Amendments are considered only minimal for good medical practice, and the physician should exercise greater discretion than is called for by the law.

Physicians are frequently requested to prescribe stimulants for a variety of nonmedical reasons. One area in which such requests are made is sports. Controlled studies have shown that amphetamines can drive trained athletes to increased performance in individual events involving strength and endurance. However, it has also been shown that this practice can, by artificially pushing the athlete beyond his normal endurance level, be harmful or even fatal. Using amphetamines for this purpose also violates principles of sportsmanship and has been condemned by the American Medical Association and major amateur sports associations.

Amphetamine-type drugs, in the usual dosage range, make most individuals more alert, more wakeful (often to the point of insomnia), and less aware of fatigue, and may produce euphoria or dysphoria. The drugs have some proper medical use in a few situations where an individual "must" continue to perform adequately for an abnormally long time. The physician should judge carefully what constitutes a "must" situation. Ordinarily, most physicians do not have to consider the problems of prescribing for astronauts in orbit. However, they may be asked for amphetamine-type drugs by students preparing for examinations, by executives facing a strenuous business week, or by automobile or truck drivers making long trips. These situations are of a rather different order of magnitude, and the persons involved cannot be considered sick and in need of treatment in the usual sense.

It should be emphasized that amphetamines are not a magic source of extra mental or physical energy; they serve only to push the user to a greater expenditure of his own resources, sometimes to a hazardous point of fatigue that is often not recognized. Automobile or truck drivers, with or without amphetamines, who continue beyond their usual mental and physical capabilities risk their lives and the lives of others. Students who resort to the use of stimulants for all-night "cram" study sessions are not following sound educational practices and may find that although stimulants increase volubility during examinations, there is a concurrent loss of accuracy.

Prescribing amphetamines or any other drugs to "increase" performance involves ethical and moral as well as pharmacological and medical considerations. Since occasional use is not likely to harm the individual or lead to antisocial behavior, a thin line exists between whether this practice should be adjudged as use or misuse. However, it should be remembered that in these situations those desiring "help" are not "ill" persons needing medical treatment.

The physician who prescribes stimulants for any reason must always be alert to their dependence-producing potential and recognize that some patients may seek other sources of supply—either illegally or from another physician. There is also the danger that the efficacy of a stimulant in helping a person achieve a time-limited goal may predispose that person to look upon amphetamine-type drugs as desirable rather than dangerous substances and thus may open the door for future abuse.

Abuse of Stimulants

None of the drugs considered here is legally available without prescription. Large quantities, however, are available on the black market and, for example, thousands of pounds have been confiscated in stops along the nation's major trucking routes. The drugs are also sold "on the street" in lower socioeconomic neighborhoods and in "beatnik" or "bohemian" gathering places. The bulk of the illicit supplies apparently are diverted from legitimate channels and handled by fraudulent wholesalers and other "front" organizations. An unknown percentage is obtained from unethical druggists or through forged or altered prescriptions.

There has been an alarming increase in the number of "spree" amphetamine abusers, usually teenagers or young adults, who use the drugs in a social setting for "kicks" or as an "experience." Many of these persons combine stimulants with other drugs, including alcohol, and "experiment" with the effects obtained from the various combinations. Not infrequently, stimulants are taken intravenously by serious drug abusers. More often, they are taken orally in the form of amphetamine-barbiturate combinations.

Patterns of self-medication with amphetamine-type drugs are varied. Some persons start taking stimulants to counteract effects resulting from abuse of barbiturates or alcohol, thus developing a cyclical pattern of sedation-stimulation in which, to a degree, each type of abuse counter-balances the effects of the other. Other persons try to achieve both effects simultaneously. In these cases, the clinical problem is of a dual nature.

Other dependence-prone persons, who have been introduced to stimulants as an anorexiant or to combat fatigue or depression, become chronic abusers. They often obtain their stimulants by "shopping" from one physician to another. Some develop a relatively mild form of psychic dependence in which, although believing that the drugs are essential to maintain their daily routine, they do not increase the dosage much beyond usual therapeutic limits. The more prevalent pattern of abuse is the one in which the person self-administers the drug with increasing frequency and in increasing amounts to get the desired euphoric effects.

With all dangerous drugs, the principal hazards of self-medication is that the abuser often is incapable of accurately evaluating his performance and is likely to overmedicate—a practice that, in neurotic or dependence-prone persons, often leads to chronic abuse.

Psychiatric Considerations

As with types of drug dependence, abuse of the amphetamine-type drugs almost invariably reflects some underlying form of psychopathology. Amphetamine dependence is a medical syndrome: a symptom complex that usually reflects some form of psychological and behavioristic disorder that has preceded and predisposed the patient to drug abuse. The stimulant is commonly used as an "adjustive" mechanism to help the person "deal" with problems of living and emotional difficulties. Abuse constitutes a "reaching out" for something without which the patient feels relatively helpless, and there is a continuum between what constitutes ill-advised "self-medication" and full abuse.

The underlying reasons for drug abuse vary from person to person, and the drug may serve different purposes at different times for the same patient. Usually, the amphetamine-dependent patient is, consciously or unconsciously, seeking to attain one or more of the following effects: relief from fatigue, increased mental alertness, a heightened sense of well-being (euphoria), and relief from the emotional tone of depression.

Each drug-dependent patient must be individually studied, evaluated, and diagnosed in terms of specific psychodynamics, physiological conditions, pharmacological reactions, and sociological characteristics. A determination must be made as to whether these factors are multiple contributants to or complications (consequences) of his drug-dependent state. Such an evaluation is essential before a therapeutic course of action is begun.

As in all types of drug dependence, dependence on amphetamine-like substances is generally a chronic, relapsing disorder. The treatment goal should be abstinence, but success or failure cannot be gauged by the single criterion of relapse. Changes in the person's social and economic activities as well as subjective responses and improvement in his physical condition must also be considered. Even though there is intermittent, periodic, or even continued drug abuse, continual treatment of the patient's dependent state and underlying emotional disorder is essential.

Diagnosis of Misuse and Abuse

General

When dosage is kept within the therapeutic range, tolerance to the amphetamines develops rather slowly, but progressive increments in dosage will speed up the development of tolerance to a point that permits ingestion of amounts hundreds of times greater than the therapeutic limits. Cases involving the routine ingestion of several thousand milligrams have been reported, and chronic abusers of amphetamine can develop a tolerance to amounts far greater than the ordinary minimal lethal doses.

An unusual feature of amphetamine tolerance is that the cardiovascular system becomes tolerant to large doses rather rapidly so that the heart rate and blood pressure may not be significantly increased in chronic abusers. Similarly, the pupils may no longer show dilation, and findings at physical examination may be within normal limits in spite of active abuse.

Although the tolerant, large-dose, chronic stimulant abuser may not exhibit obvious physical signs of his drug dependence, he will usually show signs of social, economic, and emotional deterioration (eg, downgrading of job, run-down physical condition, and unkempt appearance). Such a person also tends to become unreliable, irritable, and unstable. The presence of amphetamine can be established by testing the urine, but, currently, only a few laboratories are equipped for this procedure. It is to be hoped that within a short time testing facilities will be more readily available.

When signs and symptoms of a more specific nature do occur, they are associated with the effects of the drug on the sympathetic nervous system. In cases involving single, large doses in nontolerant persons or a sudden increase in dose above the level of tolerance, the following signs may be present: tachycardia, dilated pupils, elevated blood pressure, anorexia, and hyper-reflexia. Other indications of the possible presence of amphetamines are nervousness and jitteriness, unclear or rapid speech, and euphoria or dysphoria. The syndrome often may be confused with other types of intoxication or mistaken for an acute anxiety reaction. The duration of the syndrome is variable, and it is generally thought that this variability is related to any underlying or latent psychiatric disorder.

Amphetamine Psychosis

In some persons, amphetamines produce an acute and florid paranoid psychosis. This phenomenon was recognized in 1938, and one of the best reports on the subject is that of Connell.[1] The syndrome is characterized by a paranoid state with auditory and/or visual hallucinations. Although the condition is clearly drug-induced, it lacks certain features of an organic delirium since there is no disorientation or true confusion. Amphetamine psychosis usually takes the form of an acute paranoid reaction with variable amounts of anxiety and feelings of reference. Usually, patients do not exhibit the specific dissociated and autistic disorganization of thinking associated with schizophrenic states.

Amphetamine psychosis has been observed after acute poisoning with a single dose of 50 mg and after a "spree" involving markedly increasing doses over four to five days. However, it is more common in persons who have been taking large doses of amphetamines for prolonged periods. One study of 242 individuals with one- to five-year histories of chronic drug abuse revealed signs of amphetamine psychosis in 201 cases.

Even without specific therapy, the psychiatric manifestations associated with amphetamine psychosis usually disappear in three to six days after discontinuation of the drug, but they may last for several weeks. However, without definitive or supportive treatment and aftercare, relapse to the abuse of amphetamine is frequent and hospitalization may again be required.

Withdrawal

There is no evidence that persons develop physical dependence to stimulant drugs, and abrupt withdrawal will not produce seizures; nor is it life-threatening, even for large-dosage, chronic abusers or persons with amphetamine psychosis. Depending on the intensity of the abuse, all measurable traces of amphetamine should disappear from the body in from two to seven days.

Although there is no characteristic abstinence syndrome, the abrupt discontinuance of amphetamines is not without complications. Withdrawal can uncover an underlying depression or it may precipitate a depressive reaction, often with a suicidal potential. There also is some evidence that in certain persons amphetamine intoxication can precipitate a schizophrenic episode.

In many persons whose stimulant intake masks chronic fatigue, withdrawal is followed by a two- or three-day period of intense tiredness and sleepiness. In patients who are recovering from amphetamine psychosis or in those who exhibit severe restlessness or anxiety, the administration of a phenothiazine tranquilizer may be indicated, as well as a barbiturate at night.

Because of the frequency of multiple dependence patterns, the physician should make every effort to ascertain the patient's drug history before attempting withdrawal. A routine check should be made for needle marks which may indicate concurrent narcotic dependence. As noted, the amphetamine abuser often is taking barbiturates, in combinations or separately and, if so, procedures should be instituted to withdraw him from barbiturates.[2]

For these reasons, withdrawal should generally take place in a drug-free environment where hospital and nursing facilities are available. In those who abuse amphetamines only mildly, the drug can safely be withdrawn from patients on an ambulatory status if the physician has a complete knowledge of each patient's drug history and can be certain of the absence of clandestine supplies.

Treatment and Aftercare

Withdrawal is only the beginning of the treatment process for the stimulant-dependent patient. The therapeutic pattern is not significantly different from that used in cases of barbiturate or narcotic dependence. The physician should be prepared to maintain contact with the patient and be available for specific psychotherapy, or at least supportive help, for a long period. If such support is not forthcoming, the patient will probably relapse and renew his drug dependence.

Every patient must have an individualized treatment regimen and should have a complete medical, psychological, and social assessment. Particular attention should be paid to any existing job-related, marital, family, or other problems. If possible, members of the patient's family should be seen periodically. Any reports of mood or behavioral changes should be considered as indications of a possible resumption of drug abuse.

Psychiatric referral, on a private or public basis, should be made as indicated and feasible. In the absence of such referral, the general practitioner should administer those forms of psychotherapy that he is qualified to provide. In cases in which it is not possible to give specific therapy, the general physician can function effectively in a supportive and rehabilitative role.

On a broader scale, the physician should assume a prominent role in developing community facilities for the treatment, aftercare, and rehabilitation of all drug-dependent persons. As a community leader he should work not only individually but through his general hospital, local medical society, mental health association, and other professional or civic organizations. Physician leadership is essential to sound community education and prevention programs, and also in creating a climate where drug dependence is regarded as a medical problem as well as one involving social and law-enforcement agencies. Rehabilitative efforts that may improve adjustment in social, cultural, economic, and industrial spheres are also specifically indicated, just as they are generally indicated in alleviating other environmental factors that can precipitate serious social and mental disorders.

References

1. Connell, P.H.: *Amphetamine Psychosis*, Maudsley Monograph No. 5, London: Oxford University Press, 1958.

2. Dependence on Barbiturates and Other Sedative Drugs, COMMITTEE ON ALCOHOLISM AND ADDICTION AND COUNCIL ON MENTAL HEALTH, *JAMA* 193:673-677 (Aug 23) 1965.

NOTE: Several hundred products marketed under numerous trade names contain amphetamine (in the form of a salt, an optical isomer or its salt) or methamphetamine (as a salt). The list of trade names is too extensive to include here. Other drugs with amphetamine-like action used as central nervous system stimulants or anorexiants are: benzphetamine hydrochloride, chlorphentermine hydrochloride, diethylpropion hydrochloride, methylphenidate hydrochloride, phendimetrazine tartrate, phenmetrazine hydrochloride, phentermine resin and phentermine hydrochloride. Any other stimulants are controlled under PL 89-74.

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Dependence on Barbiturates and Other Sedative Drugs

In today's society, anxiety, tension states, insomnia, and other manifestations of stress are common. Many persons seek relief by self-medication with alcohol, and "over-the-counter" and prescription sedatives. Unfortunately, social acceptance of this kind of self-medication seems to be increasing. It is essential, therefore, that physicians maintain and strengthen their dominant role in assuring proper use of sedative medication. The responsibility includes the administration of the minimum amount of drug needed to control the patient's symptoms and the avoidance of prescribing excessive quantities of a drug, in terms of both amount and duration, which is very likely to lead to strong psychic and physical dependence[*] and compulsive abuse, particularly by emotionally unstable persons.

Historical Note

Drug abuse is probably as old as the earliest civilizations. Man has used great ingenuity in identifying substances which ease tensions, but for centuries available agents remained relatively static, limited to botanicals and their derivatives. Then, in the 1850's, modern chemistry opened a new chapter with the introduction of bromides as sedatives. There was an enormous demand for these compounds and a steady increase in their use. With use, however, came misuse and abuse which often resulted in intoxication and psychotic or delirious complications. The bromide problem began to abate in the 1930's but only because the compounds were replaced by other sedatives, primarily the barbiturates. It should be noted that chloral hydrate, recognized as a sedative in 1869, and Sulfonal had histories similar to that of the bromides.

The first barbiturate, Veronal, was introduced in 1903, and a large number of others followed in quick succession. The short-acting barbiturates, especially pentobarbital, secobarbital, and amobarbital, came into widespread use within the last 20 to 30 years. Like the bromides, they have been subject to abuse. In the United States, these drugs can be purchased on the black market and are being used either alone or in combinations, particularly with heroin, amphetamines, or alcohol.

The dependence-producing qualities of the barbiturates were not immediately recognized, but they have become increasingly clear since 1940. It should be noted, however, that the long-acting barbiturates, such as phenobarbital, are less apt to be abused than the short-acting barbiturates.

In the 1950's, a new class of drugs, the so-called minor tranquilizers, began to appear. They have a barbiturate-like action and can produce both psychological and physical dependence. This group followed the pattern of the earlier sedative drugs but at a more accelerated pace. They quickly found widespread use, found their way to the black market, and have been abused in much the same manner as the barbiturates. (See the Appendix [p 677] for a list of barbiturates and other sedatives and hypnotics.)

Definition of the Problem

Barbiturate Production in the United States

A survey by the Food and Drug Administration indicates that, in 1962, approximately one million pounds of barbituric acid derivates were available in the United States. This one-year inventory is enough to supply approximately twenty-four 100-mg (1½-grain) doses to every man, woman, and child in the country. An estimated 50% of these drugs were the short- and intermediate-acting barbiturates, which are particularly subject to abuse.

Estimate of Medical Need

No satisfactory method is available for estimating the legitimate medical need for barbiturate sedation, especially because of the large number of other sedatives and "tanquilizing agents" currently

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This statement was prepared by the AMA Committee on Alcoholism and Addiction, reviewed by the Council on Drugs, and approved by the Council on Mental Health.

[*] "Dependence" (barbiturate type) has been used here to replace "addiction" in conformity with recent action of the Expert Committee of the World Health Organization.

available. This makes it impossible to calculate accurately the prevalence and incidence of abuse. However, since it is considered probable that the available supply mirrors the demand, current production of all sedative drugs doubtless exceeds legitimate medical need by a considerable margin.

Use of Sedatives

By Physicians.—Each of the barbiturates and other drugs with a barbiturate-like action listed in the Appendix has specific clinical indications in the practice of medicine. Many medical problems, in everyday practice, are very efficaciously met by the proper and judicious use of these drugs. It must be emphasized that these drugs are a significantly valuable part of the therapeutic armamentarium for meeting genuine medical needs.

The barbiturates produced are prescribed for sedation, sometimes singly but commonly as the principal ingredient in a mixture. Their use is usually for the control of signs and symptoms of psychic, respiratory, circulatory, or gastrointestinal origin. Although mixtures of this type may be misused by the physician, they rarely serve as the basis for significant abuse by the patient because of the presence of other drugs which may not be tolerated in larger amounts.

The physician relies heavily on the barbiturates for the treatment of insomnia. These compounds are convenient and reasonably effective, despite certain adverse reactions such as "hang-over," development of tolerance, occasional rashes, and paradoxical excitation.

By Patients.—Although barbiturates and similar compounds require physician prescription, a number of substances with unpredictable sedative or hypnotic action are available "over the counter." Among these are the antihistamines, antiemetics, scopolamine, and bromides.

Misuse of Sedatives

Although the terms misuse and abuse are somewhat comparable, "misuse" is applied here to the physician's role in establishing a potentially dangerous type of therapy—even though it does not always lead to significant tolerance or physical dependence. Examples follow:

A physician may contribute to the misuse of sedatives by

1. Utilizing prolonged and unsupervised administration of barbiturates for symptomatic relief, often without adequate diagnosis or knowledge of the patient's past experience with medications or attitude toward drugs.

2. Acceding to the patient's demands for increased quantities of the drug because of reported lack of symptom control accompanied by increases in nervous irritability and insomnia. These demands are often the result of developing tolerance to the effect of the drug. Neglect of periodic check-ups and family consultations may also lead to an increase in the patient's barbiturate intake beyond the proper therapeutic range for that particular patient and lead to undesirable effects.

3. Shifting from barbiturates to the newer sedatives in the mistaken belief of safety from abuse. The increasing number of patients heavily dependent on the substitute drugs attests to the danger of this practice.

4. Writing refillable prescriptions for barbiturates or their substitutes without thought of cumulative effects, additive action with other depressants, or the possible establishment of strong psychological or physical dependence. Since quantities of barbiturates well beyond the therapeutic range are necessary to create physical dependence, the physician has little defense for over-prescribing. Such practices are indulged in only by physicians ignorant of, or willing to ignore, the hazards involved.

Abuse of Sedatives

"Abuse" is used to describe self-administration of excessive quantities of barbiturates leading to tolerance, physical and psychological dependence, mental confusion, and other symptoms of abnormal behavior. The groundwork for drug abuse may often be established by therapeutic misuse by the physician; however, many persons will seek drug supplies from sources other than the physician. Excessive use is likely to result in the user becoming wholly dependent on barbiturates to the exclusion of other values in life. Many dependent persons seek to avoid reality, gain relief from tensions and anxieties. They take these drugs in lieu of or in addition to alcohol or opiates. Others follow the same procedure in search of paradoxical excitation and new thrills. Under such circumstances, only the unethical physician will voluntarily supply the drug to maintain a state of chronic intoxication.

Psychiatric Considerations

Generally any patient whose psychological dependence on a barbiturate drug has reached a degree sufficient to constitute drug abuse has some form of underlying psychopathology. The excessive use of barbiturates usually induces additional psychopathologic changes. The barbiturate-dependent person, in these cases, is directly comparable to the opiate-dependent person.

Drug dependence is a medical syndrome, a symptom complex, and almost always reflects some form of underlying mental disorder which has preceded and predisposed the patient to the development of drug abuse. To a great extent the drug-dependent person manifests his mental disorder through his craving for and relationship to the drug substance. Psychiatric examination usually demonstrates a significant degree of additional symptoms of psychologic and behavioristic malfunctioning. According to the specific pharmacologic characteristics of the particular drug on which the individual is dependent, there will also be many secondarily elaborated physical, physiological, psychological, and social complications and consequences. These manifestations, which vary from drug to drug and patient to patient, are discussed in other sections of this report.

The underlying reasons why an individual takes barbiturates (ie, the psychodynamics of drug dependence) vary from person to person and may even serve different purposes at different times for the same patient. It should be noted that there are some groups in society, subject to special tansion situations, for whom certain forms of "escape" are socially acceptable. In these groups, barbiturate abuse may be found particularly in adolescents and younger adults. In all cases, however, the drug-dependent person has found something that he knows will give him "relief" from tensions and anxieties which to him are unbearable. The drug is being used as an "adjustive" mechanism for living problems. It is a symptom representation, a behavioristic reflection, of some form of psychological stress-functioning; an attempt to deal with or master some form of intrapsychic imbalance, conflict, or excitation. Barbiturate dependence is seen in persons trying to deal with anxiety, guilt, aggression, inadequacy, depression, sexual urges, perversions, physical pain, and other expressions of psychoses, neuroses, and character disorders. A great variety of psychopathological reactions are inextricably interwoven with the dependency process, and practically every entity in the psychiatric diagnostic nomenclature will be seen at one time or another.

In view of these considerations, each drug-dependent patient must be individually studied, evaluated, and diagnosed in terms of specific psychodynamics, physiological status, pharmacological reactions, and sociological characteristics. Determination must be made as to whether these factors are multiple contributants and/or complications (consequences). Such evaluation is necessary before deciding on a course of therapeutic action for any particular patient. One cannot rely on general statements which purport to relate uniformly to all drug-dependent persons.

Barbiturate dependence has one characteristic in common with all other states of drug dependence. It is almost always a chronic relapsing disorder, and cycles of withdrawal and reversion to drug use are likely to occur in most cases. Success or failure, however, cannot be measured by the single criterion of relapse. In all cases, continuing treatment of the dependency state and any underlying emotional disorder is essential, even though there is intermittent, periodic, or even continuing drug use. There is good reason to believe that the total course of this disorder is influenced by adequate treatment over rather long periods.

Patterns of Abuse

Types of Abusers

Essentially there are four types of barbiturate-drug abuse, and they overlap only occasionally.

1. In the first group are persons seeking the sedative (hypnotic) effects of the drug in order to deal with states of emotional distress. This pattern may be carried to such a degree that the person looks for almost total oblivion and semipermanent stupor, is constantly in bed, and gets up only to nature's calls or to obtain more drugs.

2. In the second group there is a paradoxical reaction of excitation that occurs after tolerance has developed because of prolonged use. The drug now stimulates rather than depresses and is taken to exhilarate and animate the person to so-called increased efficiency. Cases also exist where there is an idiosyncratic pharmacologic reaction and the drug stimulates without long-term use. In still other cases, an *apparent* stimulation will be observed owing to the release phenomenon in which the barbiturates impair various psychological inhibitory mechanisms. In cases of this nature it is important to stress the inherent contradiction of giving more barbiturate in an attempt to control the state of sedative-induced stimulation.

3. In a third group are persons who take barbiturates to counteract abuse effects of various stimulant drugs, such as the amphetamines. They set up a mutually reciprocating, cyclical pattern of stimulation-sedation. Each type of drug abuse tends to counterbalance the pharmacological effects of the other. Some individuals in this group try to achieve both effects simultaneously. The clinical problem, in these cases, is of a dual nature.

4. In the fourth category, barbiturate abuse is found in combination with other types of drug abuse, mainly alcohol and/or opiates. Many alcoholics attempt to counteract the withdrawal effects of alcohol with barbiturates. Frequently, alcohol and barbiturates are combined in an attempt to obtain effects that surpass those of either. This practice is especially hazardous, as the cumulative effects can easily result in very serious intoxication or death. Narcotic drug abusers will often turn to the abuse of barbiturates, particularly if opiate drugs are not readily available. If both drugs are taken at the same time, the clinical response is also very hazardous.

Suicide

Barbiturates are high on the list of suicidal poisons.† These suicides may be either intentional or unintentional. Most depressed patients, particularly those with psychoneurotic depressions, know that barbiturates are an effective suicidal means. Patients often accumulate large amounts of drugs by hoarding. Safeguards against this practice require a comprehensive and coordinated effort by the physician, nurse, pharmacist, and family.

Unintentional or accidental suicide falls into a different category and is usually related to two phenomena: (1) errors in the perception of the passage of time occurring at a given level of barbiturate intake and (2) the slow absorption rate, with delayed pharmacological effects, occurring after oral administration of barbiturates or similar drugs. Large quantities of barbiturates in the stomach also diminish gastric and intestinal function and further delay absorption. The user, not getting the desired effect within what seems to him a long time, continues to take tablet after tablet until he is unconscious. In the process, he may ingest a lethal dose.

Another type of accidental or unintentional suicide are those "acting-out" situations referred to as "suicidal gestures." Too often individuals will miscalculate how much barbiturate should be taken to accomplish what they are seeking and will ingest a lethal dose. In other cases, for some reason or other, the "rescuer" assigned by the patient making the suicide gesture, does not appear or does not react

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†Although it is beyond the scope of this article, the great importance of prompt and knowledgeable treatment of acute barbiturate poisoning is stressed.

as anticipated. The physician must be alert to the fact that in many cases the patient casts him in the role of the "rescuer."

Diagnosis of Misuse and Abuse

General

In an attempt to conceal their problems, many patients will give unreliable and misleading information. The physician should suspect dependence on sedatives if members of the family report that the patient is sedated, confused, ataxic, incoordinate, and irritable. Although it is important to secure a detailed history of drug use from the patient and his family, information from these sources is often misleading. In contrast to narcotic abusers who usually overstate their intake in an effort to obtain more of the drug, the barbiturate abuser generally understates his intake. He may report taking one or two tablets a night for sleep, whereas subsequent investigation may reveal that the patient has made multiple purchases and that his daily ingestion is large enough to be associated with strong physical dependence. However, there are patients who, under certain circumstances, will overstate their drug intake to procure larger amounts. This occurs most commonly in patients entering a hospital.

Early diagnosis of barbiturate abuse and/or dependence is often difficult. In many cases, drug dependence or intoxication is diagnosed only after hospitalization of the patient for some other clinical condition. Often the first objective finding of barbiturate dependence is the onset of acute withdrawal, perhaps a single, unexplained grand mal seizure brought on by sudden abstinence. A diagnosis of drug dependence may be overlooked because of general unfamiliarity with the barbiturate-withdrawal syndrome. Drug dependence may be difficult to detect when a state of acute barbiturate intoxication or poisoning involving intentional or unintentional overdosage is superimposed. Such intoxication may occur in both the drug-dependent and nondependent person. Barbiturate abuse may also be confused with acute depression, neurosis, schizophrenia, brain tumor, or other neurologic and psychiatric disorders.

Intoxication

Early diagnosis based on definitive clinical evidence is essential. Intoxication with barbiturates resembles intoxication with alcohol. Symptoms and signs include various degrees of clouding of consciousness with impairment of mental functioning, confusion and poor judgment, euphoria or depression, loss of emotional control, irritability, abnormal behavior, and occasionally convulsions or signs of a toxic psychosis. Patients will also show objective signs of dysarthria, ataxia in gait and station, muscular incoordination, nystagmus, adiadochokinesia, ptosis, pupillary changes, and hyporeflexia or areflexia either symmetrically or asymmetrically. Coma is unusual, as is inanition. Signs of inanition suggest that large amounts of amphetamines or alcohol have also been used. Respiratory rate and volume are not greatly depressed. The intensity of symptoms is variable and partly related to food intake, since the effects of the barbiturates appear sooner and are much more intense if the drug is taken into an empty stomach.

Tolerance

Patients often request increases in dosage, particularly of the short-acting barbiturates, because of diminished hypnotic effectiveness. Within limits, progressive increases in dosage result in increasing tolerance to subjective effects. This may be partially avoided by shifting to the long-acting barbiturates, barbital or phenobarbital, or to sedatives of a different chemical type. Tolerance, since it permits the ingestion of large doses with minimal ataxia and psychotoxicity, may be an important factor in the development of physical dependence. In contrast to that with the opiates, tolerance with barbiturates does not result in a very significant increase in the lethal dose, as evidenced by the low survival rate of "suicides" in barbiturate-dependent persons.

Withdrawal Syndrome

Sudden and abrupt withdrawal of barbiturates from a person who is physically dependent results in definite abstinence signs and symptoms. Their intensity varies according to the dose taken, the length of time the patient has been physically dependent, the degree of intoxication produced by doses consumed, and individual factors which remain incompletely understood. During the first eight hours after abrupt withdrawal, signs and symptoms of intoxication decline and the patient appears to improve. As these signs and symptoms recede, increasing anxiety, headache, twitching of various muscle groups, nervousness, tremor, weakness, impaired cardiovascular responses when standing, and vomiting become evident. They become fairly intense after 16 hours of abstinence and are rather severe after 24 hours. Between the 30th and 48th hours of withdrawal, convulsions of grand mal type are very likely to occur. Occasionally, convulsive seizures are observed as early as the 16th hour and as late as the eighth day. Frequently, there is a period of postconvulsive confusion lasting for one or two hours. At times, there will be increasing insomnia culminating in a state of delirium, closely resembling delirium tremens and characterized by confusion, marked tremors, disorientation, hallucinations, and delusions. Ordinarily the delirium lasts less than five days and ends with a prolonged period of sleep.

Even though no treatment is given, the entire withdrawal syndrome is usually a self-limited condition. Clinical recovery appears to be complete and no organic sequelae are known to occur. However, patients have died during uncontrolled, untreated barbiturate-withdrawal syndromes.

Treatment of the Withdrawal Syndrome

Since significant abstinence symptoms and signs do not occur even after long-term ingestion of comparatively small doses (less than five therapeutic doses in 24 hours), it is *theoretically* possible to withdraw patients on a small-dosage regimen on an ambulatory basis. However, this is rarely successful, as it requires the complete cooperation of a person who probably has a strong psychological dependence on the drug.

Withdrawal of persons with strong physical dependence may be life-threatening and can only be accomplished satisfactorily, and with reasonable safety, in a drug-free environment where hospital and nursing facilities are available.

When barbiturates are the addicting drug, withdrawal must be accomplished very slowly and carefully. Manifestations of mild barbiturate abstinence, such as anxiety, weakness, nausea, and tremor, signal the danger of impending convulsions and/or psychosis. Patients in this condition should be given a short-acting barbiturate at once. Experience has demonstrated that sodium pentobarbital, 200-400 mg (3-6 grains) orally or parentally, is extremely effective. If the syndrome is not relieved within one hour, the dose should be repeated. Subsequent withdrawal consists of a graduated, four-times-daily administration of barbiturates, at the dose level which just maintains a mild degree of intoxication. Usually 200-300 mg (3-4 grains) of sodium pentobarbital, four times a day, will suffice. Clinical evidence of sedation is essential. Further reduction can begin after one or two days of observation, but the dosage should not be reduced more than 100 mg (1½ grains) daily. If abstinence signs or symptoms recur, the dosage should be temporarily increased. Close observation is required because of concomitant mental confusion, lethargy, muscular incompetence, apprehension, and possible convulsions. Supportive measures such as restoration of electrolyte balance, proper hydration with I.V. fluids, and vitamins are also in order. The usual nursing care and ward routine applicable to patients with convulsive disorders, confusion, or delirium states should be maintained.

Definitive Treatment and Aftercare

The role of the physician *does not terminate* when withdrawal of the drug from the patient has been completed. This is actually the real starting point for meeting the problem of any patient's drug dependence. Continuing contact and help are essential and must be mintained over a long period. If such help is not forthcoming, relapse to the use of drugs is almost inevitable. Each drug-dependent person must be treated as an individual and should have a complete medical, psychological, and sociological assessment. He should receive the best available treatment in terms of his own particular psychological, physical, and sociological needs.

Psychiatric referral, as indicated and feasible, should be made on either a public or private basis. The general practitioner can also administer such forms of psychotherapy as he is qualified to carry out. Even in cases where specific psychotherapy is not feasible, the physician can function effectively in a supportive and rehabilitative role, helping the drug-dependent patient to develop ways of handling tensions and anxieties without resorting to drugs.

Physicians should play an important role in the mobilization of social resources for aftercare and in providing supervision and follow-up treatment. The use of community resources, such as voluntary and governmental social agencies, can be of great value to the physician in his treatment of the drug-dependent person. Any effort that may contribute toward better adjustment in social, cultural, economic, and industrial spheres is specifically indicated in the rehabilitation of the patient.

State civil statutes providing for compulsory in- and outpatient treatment, rehabilitation, and follow-up of persons suffering from dependence on sedative drugs have been very helpful. Unfortunately, few states have such laws. In general, such statutes should be comparable to the modern and enlightened statutes for the commitment of mentally ill persons.

APPENDIX

Hypnotic and sedative drugs comprise a large group of chemically unrelated substances which have the common property of inducing sedation and sleep with small quantities and anesthesia with large quantities. Barbital and its congeners represent the largest single group of these compounds.

The following drugs are on the US market:

Barbiturates

- Barbital (Veronal)
- Mephobarbital (Mebaral)
- Metharbital (Gemonil)
- Phenobarbital (Luminal)
- Amobarbital (Amytal)
- Aprobarbital (Alurate)
- Butabarbital (Butisol)
- Diallylbarbituric acid (Dial)
- Probarbital (Ipral)
- Talbutal (Lotusate)
- Vinbarbital (Delvinal)
- Cyclobarbital (Phanodorn)
- Heptabarbital (Medomin)
- Hexethal (Ortal)
- Pentobarbital (Nembutal)
- Secobarbital (Seconal)
- Hexobarbital (Cyclonal, Evipal, Sombulex)
- Methitural (Neraval)
- Methohexital (Brevital)
- Thiamylal (Surital)
- Thiopental (Pentothal)
- Allylbarbituric acid (Sandoptal)
- Butethal (Neonal)
- Cyclopentenyl allylbarbituric acid (Cyclopal, Cyclopen)
- Butallylonal (Pernocton)

Drugs With Barbiturate-Like Action

- Chlormezanone (Trancopal)
- Emylcamate (Striatran)
- Meprobamate (Equanil, Miltown)
- Oxanamide (Quiactin)
- Phenaglycodol (Ultran)
- Mebutamate (Capla)
- Carisoprodol (Soma)
- Hydroxyzine (Atarax, Vistaril)
- Ectylurea (Levanil, Nostyn)
- Ethchlorvynol (Placidyl)
- Methyprylon (Noludar)
- Ethinamate (Valmid)
- Chlordiazepoxide (Librium)
- Hydroxyphenamate (Listica)
- Mephenoxalone (Trepidone)
- Carbromal (Adalin)
- Bromisovalum (Bromural)
- Chloral Betaine (Beta-Chlor)
- Glutethimide (Doriden)
- Chloral Hydrate (Somnos, Noctec, Loryl)
- Diazepam (Valium)
- Methylparafynol (Dormison)
- Petrichloral (Periclor)
- Buclizine (Softran)

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MARIHUANA THING

Marihuana, like the Vietnam question and the new morality, is one of the issues in the credibility gap between youth and their elders. Although cannabis has been used for many centuries as an intoxicant, controversy regarding its effects has waxed and waned. In recent years it has again flared up, as the drug has become popular with an appreciable number of young people in the middle and upper socioeconomic classes. Experts from fields far distant from pharmacology and medicine have argued that marihuana is harmless. Some physicians have also shared this view. There is substantial need, therefore, for the definitive statement by competent and recognized authorities which appears in this issue of the JOURNAL (p 1181).

The Committee on Problems of Drug Dependence of the National Research Council (of the National Academy of Sciences) and the Committee on Alcoholism and Drug Dependence (of the AMA Council on Mental Health), after appraising all available information concerning cannabis, have correctly concluded that it is indeed a harmful drug and that its legalization would lead to even more serious medical and social consequences than now result from its use.

The harmfulness of marihuana, both to the individual user and to society, too often is masked by the manner in which the drug is used in the United States. Casual episodic use is the predominant pattern, and the strength of the drug typically is not of the magnitude found elsewhere in the world.

Granted that most American users do not suffer lasting physical or psychological impairment and do not exhibit a strong dependence on the substance, there are nevertheless a significant *number*, irrespective of whether the *percentage* is 10 or as low as 2, that do become chronic users with concomitant medical and interpersonal problems.

It has been argued, of course, that it is the unstable, problem-prone individual who is drawn to marihuana, and that any ensuing untoward effects would have come to the fore with or without drug-taking. If this argument were ever valid, it is not so today. The greater proportion of users are introduced to marihuana out of curiosity, youthful thrill-seeking, a desire to be "in" and a wish to demonstrate independence from a generation whose drug of choice is alcohol.

Too many of these young people, and here *both* the number and percentage appear to be significant, then proceed to experimental and spree-type abuse of other drugs. If most marihuana users do not "graduate" to heroin, many, if not most, do go on to "speed," goofballs, LSD, STP, and a variety of other three-letter hallucinogens, either in sequence or in combination. The relatively minor effects of weak marihuana preparations often give the false impression that any drug can be "handled." Thus, we are seeing a substantial number of young people who are drug-oriented, in addition to those who are strongly drug-dependent, at the very time they are being called on to make important career and other life-molding decisions.

Legalize marihuana and we change at least one of the variables in the drug-abuse complex. Enter then the more potent forms of cannabis. The psychopharmacologic effects are intensified, drug dependence and nonproductivity become more pronounced and widespread, and we have the makings of a problem approximating and perhaps exceeding the proportions of alcohol abuse and dependence.

The AMA-NRC statement justifiably points out that to create a marihuana problem of that magnitude would not solve the alcohol problem. The failure of prohibition made alcohol no less dangerous. Legalizing marihuana likewise would not change the nature of cannabis for the better, but predictably would change its form and pattern of use for the worse.

Furthermore, there is no reason to assume that, just because custom and mores made a mockery of alcohol prohibition, marihuana prohibition is unworkable or undesirable.

It is well to remember that prohibition of alcohol *followed* two centuries of relatively uncontrolled use of the drug in this country, whereas the prohibition of marihuana *preceded* by nearly three decades the present state of popularization. Fortunately, marihuana use is not part of the American tradition, and we should discredit efforts to place it there. One dangerous drug does not deserve another.

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Dependence on Cannabis (Marihuana)

Unlike narcotics, barbiturates and other sedatives, and amphetamines and other stimulants,[1-3] cannabis (marihuana) *has no known use in medical practice in most countries* of the world, including the United States. Despite this fact, the practicing physician should understand the nature of cannabis and psychological dependence on it, as well as the treatment of persons involved who may become his patients.

While there is no accurate measure of the prevalence of nonmedical use of cannabis and its preparations, it is clear that they are widely used in many parts of the world, including the United States. Those who utilize cannabis in one form or another include various personality types in diverse socioeconomic and cultural circumstances. In the United States, attitudes of rebellion against authority and thrill seeking are not uncommonly found among marihuana smokers.

History and General Background

As early as 1200 BC the hemp plant, *Cannabis sativa*, was described as a source of long textile fibers, and its "narcotic" properties were documented in Chinese writings by 200 AD. Its numerous derivatives, which can be smoked, eaten, or drunk, have become known throughout the world by a variety of names, including hashish, bhang, ganja, dagga, and marihuana. Traffic in and use of cannabis derivatives now is restricted in practically every civilized country in the world, including those where custom has allowed its introduction into religious rites.

India, where the intoxicating properties of ganja were generally recognized by about the tenth century, has undertaken a phased program for the reduction of the use of cannabis in the various forms of indigenous medicine, which will hopefully lead to the eventual elimination of such use.

Despite almost universal prohibition, cannabis use is still socially acceptable in certain parts of the world, though there is a trend away from such acceptance. The principal areas of the world involved in the nonmedical use of cannabis preparations are the Middle East, the African nations, and the Americas, including the United States.

The migratory course of marihuana to the New World is an interesting historical development. Apparently originating in Asia and the Eastern Mediterranean basin, the drug spread via Africa and South America to Mexico. Only within the past 60 years has marihuana been used in the United States. In spite of the proximity of Europe to the Mediterranean, its use there had little significance until recently, when it was imported to England and France as the American "vice."

Wide differences in the volume and form of use are evident despite the absence of hard data on the amount by country. Some authors believe that marihuana smoking is on the increase in the United States. Again, there are no data to prove or disprove this belief because there is no base line from which to make a judgment. Increasing or not, use is substantial and represents a problem with medical, social, and legal implications.

The term "cannabis" is used in international language according to these definitions:

"Cannabis" means the flowering or fruiting tops of the cannabis plant (excluding the seeds and leaves when not accompanied by the tops) from which the resin has not been extracted, by whatever name these parts may be designated.

"Cannabis plant" means any plant of the genus *Cannabis*.

"Cannabis resin" means the separated resin, whether crude or purified, obtained from the cannabis plant.

The term "marihuana," used primarily in the Americas and in England, refers almost exclusively to the preparations of the leaves and flowering tops of the cannabis plant, which are dried, sometimes mixed with tobacco, and then typically smoked in cigarettes. In the vernacular of the street, they are called "reefers," "joints," or "sticks" containing "hay," "grass," "pot," "weed," or "tea." The inhaled smoke has increased effect when the cigarette is reduced to a short "butt," because the active ingredients concentrate there during smoking.

Legally, the preparations of cannabis are dealt with in international treaties and in the western countries, including the United States, in the same general manner as the narcotics. In the United

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This is another in a series of statements regarding drug dependence, prepared by the American Medical Association's Committee on Alcoholism and Drug Dependence (formerly Committee on Alcoholism and Addiction) and approved by the Council on Mental Health.

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States, they are controlled under the Marihuana Tax Act, administered by the Federal Bureau of Narcotics.

Pharmacology and Biochemistry

The female cannabis plant develops a resinous material which incorporates the active pharmacological principles. This resin can be extracted from the base of cannabis confections, beverages, and medicaments, or from the dried tops of the plant, leaves, and flowers, and may be pulverized and smoked with or without admixture with tobacco. The inhaled smoke is irritating, and long continued exposure to it induces chronic respiratory disorders.

The principal active ingredients of cannabis resin are cannabinols, especially tetrahydrocannabinols, which are now known to exist in several isomeric forms. Many cannabinols have been isolated, but it is not yet known what their exact state or proportion is in the resin which brings about the typical effects of the drug as a whole in man.

A tetrahydrocannabinol has been synthesized recently, and its identity with a product of a natural origin established. In addition, many cannabinol derivatives have been prepared, utilizing, for the most part, starting materials of natural origin. Extensive animal and clinical trials of these substances are adding much to our knowledge of cannabis action.

The actions of cannabis are exerted primarily on the central nervous system, but their modes of action are poorly understood. Their effects, through smoking, are felt in a very few minutes and may persist for as long as 12 hours.

Cannabis Dependence and Its Consequences

No physical dependence or tolerance has been demonstrated. Neither has it been demonstrated that cannabis causes any lasting mental or physical changes; comments by physicians who have recently visited colleagues in Africa suggest a need for more intensive study of this possibility.

Persons who use marihuana continually and as the symptomatic expression of a psychological conflict, a means of gaining social acceptance, or a way of escaping painful experiences of anxiety or depression may be said to be psychologically dependent on the substance. Continuous use may be associated with the development of psychiatric illness, although few chronic users are admitted to psychiatric inpatient facilities. Chronic marihuana users often are lethargic, neglect their personal appearance, and occasionally may experience a deep sense of failure after believing they are capable of accomplishing great things. The extent of psychological dependence on marihuana in the United States is not known, but such dependence may reasonably be presumed to be less than that to narcotic drugs on the grounds that the satisfactions obtained from marihuana by drug dependence-prone individuals are insufficient to meet their psychological needs.

Of greater interest than psychological dependence on marihuana is the casual, episodic, noncontinuous use of the substance by adolescents and young adults in and around urban centers and college towns, and indications that its use among high school students may be spreading. Such experimental use, if it does not lead to intoxication or frequent use and dependence, may not be medically dangerous. However, it is of concern as a medicolegal problem because marihuana is a drug, because its possession and distribution violates federal and many state laws, and finally, because its use is probably disproportionately higher among young persons with developing psychiatric problems than among those without them.

It is in the nature of adolescence to seek new and exciting experiences, to question self, family, and society, to try on and discard new guises of behavior, to reconcile opposing pulls and strains, and to act like child and adult. Such experiences contribute to personal growth and ultimately to intellectual development and social progress, though in some instances the behavior may appear to some viewers as thoughtless, irresponsible, or rebellious. The kaleidoscopic activity of adolescence assumes forms and patterns unique to each generation of adolescents, each having its own values, totems, and taboos. The content of an adolescent's experiments depends on many variables related to the cultural patterns and mores of his area, his own psychological development, and if marihuana is involved, on its availablility.

Urban areas, with their concentrated population, and college towns within a two- or three-hour driving range of cities attract those who participate in drug traffic; although in college towns, marihuana suppliers are most often students who purchase the drug from a city "pusher" and then bring it into the college community. The number of young persons who become psychologically dependent on marihuana or progress from marihuana to drugs that produce physical as well as psychological dependence is not known. It is likely that those who do become dependent on marihuana or other drugs are psychiatrically disturbed and that drug use is but one of a complex of psychological and behavioral symptoms manifested by them.

Most experimenters either give up the drug quickly or continue to use it on a casual basis similar to the social use of alcohol. Those experimenters who find the effects of the drug unpleasurable, or at least not worthwhile for them, are the ones who immediately forego further use.

Most persons who experiment with and many who become dependent on marihuana do not go on to stimulants, narcotics, or hallucinogens, such as lysergic acid diethylamide (LSD). It is a fact, however, that persons physically dependent on other substances, such as heroin, almost always have had experience with marihuana, although not necessarily prior to experiences with so-called hard drugs.

Another area of society in which marihuana use has been observed for many years is the urban ghettos where feelings of hopelessness, powerlessness, oppression, and futile dissatisfaction provide fertile soil for cultivating the growth of such use. The use of marihuana among Puerto Ricans and both southern and northern Negroes is reputed to be high. In all likelihood, marihuana use among the poverty-stricken urbanite is concomitant with use of other dependence-inducing substances and a broad range of asocial and antisocial activity.

Characteristics of Cannabis Intoxication

Subjectively, the user experiences one or more of the following effects: a feeling of well-being, hilarity, euphoria, distortion of time and space perception, impaired judgment and memory, irritability, and confusion.

After repeated administration and high dosage, other effects are noted, such as:

> lowering of the sensory threshold, especially for optical and acoustical stimuli, thereby resulting in [a feeling of] intensified appreciation of works of art . . ., hallucinations, illusions and delusions that predispose to antisocial behavior; anxiety and aggressiveness as a possible result of the various intellectual and sensory derangements; and sleep disturbances.
>
> In the psychomotor sphere, hypermotility occurs without impairment of coordination. Among somatic effects, often persistent, are injection of the ciliary vessels and oropharyngitis, chronic bronchitis and asthma. These conditions and hypoglycaemia, with ensuing bulimia, are symptoms of intoxication, not of withdrawal.[4]

While some persons assert that marihuana improves artistic and other creative endeavor, there is no evidence that this is so.

There is little difficulty in recognizing the intoxication of a person who has smoked a significant amount of marihuana in the preceding few hours. If the physician has an opportunity to smell the smoke of a "reefer," a characteristic acrid odor will be noted. Federal, state, and local narcotic enforcement officers and certain clinical laboratories may be helpful in identifying the odor or the dried marihuana preparation, should the latter come into the physician's hands.

The problem of recognizing a nonintoxicated marihuana-dependent person or experimenter is quite difficult. As indicated earlier, there is no physical dependence, and hence, no withdrawal syndrome. A *careful* longitudinal history from the patient and from his close friends and relatives regarding his behavior and associates may be productive. This history should be obtained in a nonjudgmental manner. Such a history, even when marihuana use has not been admitted, coupled with a careful mental-status examination may indicate the possibility of such drug use. If the patient demonstrates a psychopathological condition of such nature which could make him vulnerable to experimentation with drugs or to their abuse, positive confirmation of marihuana or other drug abuse should not be considered a prerequisite for treatment of his condition. Such treatment is indicated whether or not he experiments with or has become psychologically dependent on marihuana.

Treatment

Drug dependence is a multifaceted problem, embracing not only medical issues but almost every aspect of our culture and socioeconomic system. Obviously, there is no simple solution. The treatment and rehabilitation of the person with psychological dependence on marihuana ordinarily will require the attention not only of the physician but also of many others concerned with the problem. There will be complicating legal, educational, social, moral, or religious issues which require special skills not ordinarily possessed by the physician, and he may well find it necessary to enlist the services of those who do possess them.

Because marihuana abuse does not result in physical dependence, the physician need not apply himself to physical complications of withdrawal. He must, however, determine at the onset of treatment whether other drugs are being taken simultaneously whose withdrawal requires careful management. This is frequently the case.

Ordinarily, minimal protection during the period of acute intoxication is all that is required, beyond providing appropriate measures for correcting any concurrent physical illnesses, including malnutrition. During the initial phase, ambulatory treatment of the person with psychological dependence (as contrasted with the experimenter) is generally not satisfactory because of the tendency to relapse. At least brief hospitalization is usually recommended to separate the patient from his supply, establish relations, and initiate treatment. Complete cessation of the use of the drug is necessary, and circumstances may require the family or others to seek legal means by which the patient can be brought to treatment, in those states where this is possible.

The major focus of effective treatment cannot be on the repeated drug abuse alone, because psychological dependence is almost universally symptomatic of serious underlying personality problems, severe neurotic conflicts, or psychotic reactions. The task of the physician is to learn from the patient *what* really bothers him at both conscious and unconscious levels, and what needs are being spuriously met at both these levels by taking marihuana.

It is also the physician's task to help the patient come to such a full comprehension of his intrapsychic and interpersonal problems that they can be eliminated. Short of this, the physician may have to give long-term supportive therapy that will enable the patient to live as productive and satisfying a life as possible with his psychic handicaps and in a drug-free state. The physician, of course, cannot change real vocational, family, social, and other environmental problems contributing to the patient's difficulty merely by treating his intrapsychic disorder. For this, as noted above, collaboration with others possessing additional pertinent skills is essential.

The physician who does not have sufficient professional training to equip him to handle these difficulties may wish to make early psychiatric referral. When psychiatric resources are not available, the physician may be called upon to provide limited individual, group, or family therapy over an extended period of time. In such cases, it is particularly important to seek additional help in the community from the appropriate agencies, interested lay organizations, or concerned professionals who can add substance to the treatment program.

The physician's attitude will influence his approach to the patient. It is important for the physician to remember that a person who has a psychological dependence on marihuana is sick and deserving of understanding and treatment, even though he may have been involved in unlawful activity.

A concomitant consideration is that, through the use of marihuana, a behavioral pattern often has been established in which the patient has experienced rejection by the wider society and acceptance perhaps only by those with similar problems. He may therefore have alienated himself from more desirable associates and family, or perhaps never have achieved a period of reasonably satisfactory adjustment to which he may return. Rehabilitation may require concerted community support, with simultaneous efforts to provide housing, employment, spiritual assistance, and other aids.

Each patient represents a unique therapeutic problem calling for ingenuity on the part of all who endeavor to help. The prognosis for persons psychologically dependent on marihuana, and particularly for experimenters, is good in most cases.

Legal Control

Legal control is one of the most important and effective aspects of prevention. Federal control of marihuana is the responsibility of the Federal Bureau of Narcotics under the Marihuana Tax Act of 1937 (US Code Title 26, sections 4,741-4,776).

The basic features of federal control are to make marihuana dealings visible to public scrutiny, and to render difficult the acquisition of marihuana for nonmedical and noncommercial purposes.

The act requires all persons with legitimate need to handle marihuana to register and pay an occupational tax, requires that all marihuana transactions be recorded on official forms provided for that purpose, makes transfers to a registered person subject to a tax of $1 an ounce, and makes transfers to an unregistered person subject to a prohibitive tax of $100 an ounce.

The controls over marihuana under the federal and state laws are dissimilar. Under the federal law, marihuana is not considered a narcotic drug. On the other hand, many states have covered marihuana by including it within the definition of "narcotic drug" since adoption of the Uniform Narcotic Drug Act in 1932. Marihuana is equated in many state laws with the narcotic drugs because the abuse characteristics of the two types of drugs, the methods of illicit trafficking, and the types of traffickers have a great deal in common.

The Physician-Citizen's Role

Only an aroused and concerned public can create, mobilize, and implement resources to deal adequately with as serious a problem as drug dependence in all its forms. The proper stimulus must come from citizens who are community leaders aware of these needs and from professionals who apply themselves to these needs.

Frank and forceful public discussions, focusing on the futility and inherent dangers in experimentation with drugs such as marihuana and the consequences of any subsequent psychological dependence, can act as deterrents.

Expanded counseling services in schools could present more effective and more suitable alternatives to young people for dealing with their problems.

Continuing emphasis on the incompatabilities between a primarily punitive approach toward those who experiment with or become psychologically dependent on marihuana and modern concepts of treatment and rehabilitation could lead to further improvement of legislation and enhance the opportunities for the drug-dependent person to obtain treatment. The Narcotic Addict Rehabilitation Act of 1966, which went into effect Feb 6, 1967, was a substantial step in this direction at the federal level.

Persistent vigilance by law-enforcement agencies in eliminating illegal sources of the drugs needs public support and sufficient means with which to do the job. Real crusading may be required before adequate amounts of public funds are devoted to creating and operating effective treatment facilities and programs for the afflicted and for the control of illicit drug use.

Finally, only community understanding, compassion, interest, and active aid will enable the rehabilitated drug-dependent person to find a satisfactory place in society.

Marihuana is centuries old, but it represents a constant danger. The responsibilities of the citizen, including the physician, are clearly defined. The time to begin is now.

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Council on Mental Health

Marihuana and Society

After careful appraisal of available information concerning marihuana (cannabis) and its components, and their derivatives, analogues and isomers, the Council on Mental Health and the Committee on Alcoholism and Drug Dependence of the American Medical Association and the Committee on Problems of Drug Dependence of the National Research Council, National Academy of Sciences, have reached the following conclusions:

1. Cannabis is a dangerous drug and as such is a public health concern.

For centuries, the hemp plant (cannabis) has been used extensively and in various forms as an intoxicant in Asia, Africa, South America, and elsewhere. With few exceptions, organized societies consider such use undesirable and therefore a drug problem, and have imposed legal and social sanctions on the user and the distributor.

Some of the components of the natural resins obtained from the hemp plant are powerful psychoactive agents; hence the resins themselves may be. In dogs and monkeys, they have produced complete anesthesia of several days' duration with quantities of less than 10 mg/kg.

Although dose-response curves are not so accurately defined in man, the orders of potency on a weight (milligram) basis are greater than those for many other powerful psychoactive agents, such as the barbiturates. They are markedly greater than those for alcohol. In India, where weak decoctions are used as a beverage, the government prohibits charas, the potent resin, even for use in folk medicine. In many countries where chronic heavy use of cannabis occurs, such as Egypt, Morrocco, and Algeria, it has a marked effect of reducing the social productivity of a significant number of persons.

The fact that no physical dependence develops with cannabis does not mean it is an innocuous drug. Many stimulants are dangerous psychoactive substances although they do not cause physical dependence.

2. Legalization of marihuana would create a serious abuse problem in the United States.

The current use of cannabis in the United States contrasts sharply with its use in other parts of the world. In this country, the pattern of use is primarily intermittent and of the "spree" type, and much of it consists of experimentation by teenagers and young adults. Further, hemp grown in the United States is not commonly of high potency and "street" samples sometimes are heavily adulterated with inert materials.

With intermittent and casual use of comparatively weak preparations, the medical hazard is not so great, although even such use when it produces intoxication can give rise to disorders of behavior with serious consequences to the individual and to society.

And, while it is true that now only a small proportion of marihuana users in the United States are chronic users and can be said to be strongly psychologically dependent on the drug, their numbers, both actual and potential, are large enough to be of public health concern.

If all controls on marihuana were eliminated, potent preparations probably would dominate the legal market, even as they are now beginning to appear on the illicit market. If the potency of the drug were legally controlled, predictably there would be a market for the more powerful illegal forms.

When advocates of legalizing marihuana claim that it is *less harmful* than alcohol, they are actually comparing the relatively insignificant effects of marihuana at the lower end of the dose-response curve with the effects of alcohol at the toxicity end of the curve—ie, the "spree" use of marihuana vs acute or chronic "poisoning" with alcohol. If they compared both drugs at the upper end of the curve, they would see that the effects on the individual and society are highly deleterious in both cases.

Admittedly, if alcohol could be removed from the reach of alcoholics, one of the larger medical and social problems could be solved. But to make the active preparations of cannabis generally available would solve nothing. Instead, it would create a comparable problem of major proportions.

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That some marihuana users are now psychologically dependent, that nearly all users become intoxicated, and that more potent forms of cannabis could lead to even more serious medical and social consequences—these facts argue for the retention of legal sanctions.

3. Penalties for violations of the marihuana laws are often harsh and unrealistic.

Persons violating federal law with respect to possession of marihuana are subject to penalties of from 2 to 10 years imprisonment for the first offense, 5 to 20 years for the second offense, and 10 to 40 years for additional offenses. Suspension of sentence, probation, and parole are allowed only for the first offense. Many of the state laws provide for comparable penalties. With respect to sale, penalties are even more severe.

Laws should provide for penalties in such a fashion that the courts would have sufficient discretion to enable them to deal flexibly with violators. There are various degrees of both possession and sale. Possession ranges from the youngster who has one or two marihuana cigarettes to an individual who has a substantial quantity. Sale may range from the transfer of a single cigarette to the dispostion of several kilograms of the drug.

While persons should not be allowed to become involved with marihuana with impunity, legislators, law enforcement officials, and the courts should differentiate in the handling of the occasional user, the frequent user, the chronic user, the person sharing his drug with another, and the dealer who sells for a profit.

Of particular concern is the youthful experimenter who, by incurring a criminal record through a single thoughtless act, places his future career in jeopardy. The lives of many young people are being needlessly damaged.

For those persons who are chronic users of the drug, and are psychologically dependent on it, general medical and psychiatric treatment, plus social rehabilitative services, should be made readily available. Such persons should not be treated punitively for their drug abuse alone any more than are persons dependent on other drugs, such as narcotics or alcohol.

Furthermore, if the purpose of imposing penalties is to deter acts which might injure the individual and disrupt society, then equitable penalties, insofar as they enhance respect for the law, can contribute to effective prevention.

4. Additional research on marihuana should be encouraged.

Only recently has an active hallucinogenic principle of cannabis been exactly identified and synthesized. Sufficient time has not elapsed to obtain a substantial body of pharmacologic and clinical evidence concerning its effects. There are no carefully controlled clinical studies of long-time effects of cannabis on the central nervous or other organ systems. These and other considerations point to the importance of ongoing research in this area.

It must be emphasized, however, that the issue which faces the United States today is not whether we know all there is to know about marihuana scientifically. Obviously every effort should be made to correct the deficiencies in our knowledge. The issue is whether we can ignore the experiences and observations established over centuries of heavy use of hemp preparations in various societies. A current solution to the problem does not relate to what is not known, but to those facts which are known about cannabis and its preparations. There is extensive experience in its use in all of its forms, including the effects of the potent natural resins which contain the active biological principles.

5. Educational programs with respect to marihuana should be directed to all segments of the population.

Educational material, based on scientific knowledge, should point out the nature of marihuana and the effects of its use. Such material should be an integral part of a total educational program on drug abuse.

Primary and secondary schools, as well as colleges and universities, should establish such programs.

The communications media should disseminate authoritative information to the general public.

Physicians, as professional practitioners and concerned members of the community, should call attention frequently and forcibly to the problems of drug abuse and drug dependence.

An informed citizenry, in the final analysis, is the most effective deterrent of all.

DRUG DEPENDENCE: ITS SIGNIFICANCE AND CHARACTERISTICS.—Drug dependence of the cannabis type is a state arising from chronic or periodic administration of cannabis or cannabis substances (natural or synthetic). Its characteristics are:

(a) Moderate to strong psychic dependence on account of the desired subjective effects.

(b) Absence of physical dependence, so that there is no characteristic abstinence syndrome when the drug is discontinued.

(c) Little tendency to increase the dose and no evidence of tolerance.

For the individual, harm resulting from abuse of cannabis may include inertia, lethargy, self-neglect, feeling of increased capability, with corresponding failure, and precipitation of psychotic episodes. Abuse of cannabis facilitates the association with social groups and sub-cultures involved with more dangerous drugs, such as opiates or barbiturates. Transition to the use of such drugs would be a consequence of this association rather than an inherent effect of cannabis. The harm to society derived from abuse of cannabis rests in the economic consequences of the impairment of the individual's social functions and his enhanced proneness to asocial and antisocial behaviour.—Eddy, N.B., et al: Drug Dependence: Its Significance and Characteristics, *Bull WHO* 32:721-733 (No. 5) 1965.

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Dependence on LSD and Other Hallucinogenic Drugs

In June 1966, the House of Delegates of the American Medical Association took cognizance of the serious consequences of indiscriminate use of hallucinogens.

A resolution urging strict control and supervision of their production and administration included a warning that

> these drugs can produce uncontrollable violence, overwhelming panic . . . or attempted suicide or homicide, and can result, among the unstable or those with preexisting neurosis or psychosis, in severe illness demanding protracted stays in mental hospitals.[5]

There is no accurate measure of the number of persons who take hallucinogens. It is apparent, however, that in recent years their ranks have increased, especially among college students. Widespread publicity has been given to allegedly beneficial effects of lysergic acid diethylamide (LSD), and LSD cliques have sprung up throughout the country. Because of continued illicit manufacture and distribution of LSD in particular, physicians in urban communities and university towns can expect to encounter patients who have taken these drugs.

History

Although LSD was synthesized in 1938 by Stoll and Hofmann, it was not until five years later, when Hofmann accidentally ingested an infinitesimal amount, that its hallucinogenic properties were discovered.

Subsequently, LSD was used by several investigators to induce a "model psychosis" thought to resemble schizophrenia. It was soon recognized, however, that the vivid hallucinations, spectacular illusions, and sensory distortions induced were not characteristic of that disorder, even though the resulting depersonalization was somewhat similar.

By the early 1960's an increasing number of persons were abusing (self-administering) the drug, perhaps abetted by the publications of Aldous Huxley and of Timothy Leary and his associates lauding its "consciousness expanding" qualities.

By 1965, the medical literature contained numerous reports of the adverse, and often catastrophic, untoward effects of the drug, particularly among those with preexisting severe psychopathological conditions. Twenty-seven patients with severe complications of self-administration of LSD were admitted to New York's Bellevue Hospital in a four-month period in 1965.[6] Substantial numbers have since been admitted to that and other hospitals.

Today LSD is recommended only for strictly controlled research, and its legitimate production and distribution are limited to research purposes by the Food and Drug Administration.

The AMA House of Delegates in 1966 resolved

> that no hallucinogen (LSD, mescaline, bufotenine, psilocybin, or dimethyltryptamine) shall be administered except by a physician trained in its use, and this shall apply even if the current studies show LSD to be of value in the treatment of psychoneuroses, sexual perversions, frigidity, alcoholism, or other illnesses.
>
> The American Medical Association stands unalterably opposed to any expansion of the use of psychedelic drugs beyond use by physicians. Even use by trained physicians should continue to be limited to carefully controlled experiments until incontrovertible data are available documenting LSD's efficacy and safety.[5]

Some of the other hallucinogens have been available for longer periods. Peyote has been used for the past 150 years by Indians in Southwestern United States and Mexico in connection with religious rituals and ceremonies of the Native American Church. Such use rarely if ever leads to dependence among these people. This dried top of cactus, however, is generally available on the illicit market in urban centers with relatively high drug-abuse rates. Mescaline, a product refined from cactus, is moderately available. Psilocybin and dimethyltryptamine (DMT) are relative newcomers to the illicit trade. The former is obtained with difficulty, but the latter is fairly available, and readily so in some areas.

The hallucinogens usually are taken orally, but users have experimented with practically every conceivable route of introduction, including sniffing, and subcutaneous and intravenous administration. The capsule and the sugar cube are the common

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This is the fifth in a series of statements regarding drug dependence,[1-4] prepared by the American Medical Association's Committee on Alcoholism and Drug Dependence and the Council on Mental Health.

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carriers for LSD, although animal crackers have been used in at least one area, posing a hazard for unsuspecting children. The physical appearance of the more commonly abused hallucinogens was described in THE JOURNAL by Ludwig and Levine.[7]

Pharmacology and Biochemistry

Hallucinogenic drugs include LSD, a semisynthetic derivative of ergonovine; the seeds of some morning glory varieties ("Oloiuqui," *Rivea corymbosa; Ipomoea violaceus*), the active principle of which is closely related to LSD; mescaline, a phenethylamine present in the buttons of a small cactus (mescal, peyote, *Lophophora williamsii*); psylocybin, an indole found in a mushroom ("teonanacatl," *Psilocybe mexicana*); and DMT, a synthetic indole, also found in seeds of a South American plant (*Piptadenia peregrina*). These are highly potent, with LSD being one of the most potent drugs now available. Tolerance to hallucinogens develops rapidly, but usually is lost in two or three days. Some users have built up their LSD doses to 1,000μg or 2,000μg over a period of days. The average dose is 200μg to 400μg.

Further, there is cross-tolerance among LSD, psilocybin, and mescaline, although tolerance to mescaline develops more slowly than to the other two. Paradoxically, some users report a state of increased sensitivity to LSD once they have lost their tolerance. Relapse simulating the drugged state has been reported without the ingestion of additional LSD.[8]

LSD in crude form is relatively simple to synthesize, given a supply of lysergic acid or one of the ergot alkaloids. Lysergic acid, in turn, can be produced by deep fermentation processes with only moderate difficulty, provided there is suitable equipment and knowledge. The synthesis of lysergic acid, however, is accomplished only with great difficulty. Since lysergic acid has been brought under federal control, DMT, a relatively new synthetic with a somewhat shorter and more "harsh" action than LSD, has appeared on the illicit market. An LSD "trip" or "experience" usually lasts about 12 hours and the onset is said to be fairly "gentle," whereas a DMT trip lasts about two hours and has a sudden or "rough" onset.

Dependence: Patterns of Abuse

Hallucinogen-induced dependence is psychological, not physical. The drugs have a particular attraction for adolescents and young adults who are socially maladjusted or emotionally inhibited and who constantly seek new "experiences" and "insights."

Because there is no evident physical dependence and because tolerance develops and disappears rapidly, periodic rather than continuous use is the usual pattern.

Three general classes of users have been described.[7]

One consists of narcotic drug-dependent persons who took LSD or other hallucinogens on infrequent occasions after a "fix" with narcotics.

Another group includes users of other drugs, especially marihuana, who relished the more intense effects of hallucinogens in their quest for

> agents to raise them from their apathy, to make life more meaningful, to overcome social inhibitions, and to facilitate meaningful conversations and interpersonal relationships.

A third group is composed of persons who repeatedly took LSD only or in combination with one or more of the other hallucinogens over a sustained period of two weeks to a month. Unlike those in the second group, they took the drugs not for social purposes but to achieve "some personal, esoteric goal."

As with marihuana, no one knows how many experimenters try hallucinogens once or twice and then give them up. For some, the "experience" not only fails to "fulfill" but is unpleasant and often frightening. Whether the trip is "good" or "bad" depends on a combination of factors, including the user's motives and attitudes, the nature of his companionship at the time of the trip, the physical surroundings, and possibly the purity of the drug itself.

Complications

A variety of complications have been reported in the medical literature, but three appear to be most prevalent.

1. Reappearance of the hallucinated, disorganized state without further ingestion of an hallucinogen is one type of complication. This has occurred in subjects within two months after a series of relatively few exposures. It also has occurred more than 12 months after a series of more than 200 exposures that had extended over a period of years.

2. Panic is a frequent complication. Hospitalization may be sought by the user or his companion, neither of whom can cope with the sense of terror.

3. A third relatively common complication is the development of an extended period of psychosis, sometimes after a single exposure, and usually involving a person who was prepsychotic or had a history of current or previous psychosis. There is no available evidence to suggest that the massive, disorganizing experience resulting from the taking of hallucinogens has been therapeutic for any psychotic patient. Quite the contrary!

One study describes three patients hospitalized for extended psychoses after single ingestions of LSD.[9] All previously were schizophrenics who attempted to gain "new understanding of themselves" through the drug.

> As the effects of the drug wore off, (they) were faced with the problems of returning to the real world and accommodating a vague new self image, achieved under the influence of the drug, to reality. Conflict arose as they began to interact with other people and had to become reconciled to the fact that their new understanding was

> not readily grasped or responded to by others. Rather than give up their newfound fictional sense of self, the psychotic patients strove to maintain their sense of uniqueness and withdrew from the world.

Other types of complications arise when the user becomes delusional to the degree that he believes he has unusual powers or personal invulnerability. Several suicides while under the influence of hallucinogens have been reported. Some users have been killed while crossing busy streets in the mistaken belief that they could not be hit or injured. Others have met their death in attempts to fly from a roof or window. For protection and other reasons (for example, to help control panic, should it occur) the trip taker usually enlists the aid of a "guide," an experienced user who stays with the "tripper" but takes no LSD himself at the time.

There is evidence that some chronic users, irrespective of other effects or factors, have become less productive. Limited observations suggest the need to explore the possible impairment of abstract thinking and the ability to reason. It has not been demonstrated conclusively that permanent organic or other defects result from prolonged abuse. Recent studies show that chromosomal damage can result.

Recognition of LSD Intoxication

Because LSD was once used to produce a "model psychosis" in the study of schizophrenia, it is not unusual for an LSD-intoxicated person to be mistaken for a patient suffering from an acute schizophrenic episode. LSD may be in the picture if one has a patient with "schizophrenia" or an acute panic reaction with sudden onset and essentially complete recovery in 12 to 72 hours, although overdosage of amphetamines produces somewhat similar reactions.

Laboratory tests are not practical in diagnosis. A procedure has been developed for measuring LSD in blood plasma following intravenous injection,[9] but in the case of oral administration, blood samples would have to be taken within two or three hours after ingestion to obtain measurable amounts. In either case, the procedure is not suitable for routine clinical application.

> Drugs of the LSD type induce a state of excitation of the central nervous system and central autonomic hyperactivity manifested by changes in mood (usually euphoric, sometimes depressive), anxiety, distortion in sensory perception (chiefly visual), visual hallucinations, delusions, depersonalization, dilation of the pupils, and increases in body temperature and blood pressure.[8]

The usual dose of LSD taken by a nontolerant person is 200μg to 400μg, at which level there is often rather complete disorganization. Some physical effects are experienced, however, when doses of as little as 30μg are taken.

The other hallucinogens cause slightly varied, and often less intense, reactions that differ more in degree than in kind. Mescaline produces peripheral autonomic effects, such as nausea, which tend to limit its use.

As with marihuana use and most other forms of drug abuse, the diagnosis of hallucinogen intoxication or dependence is facilitated by a careful history from the patient and his associates. It is important to couple the history with a mental status examination and a personality inventory to determine whether there are features which might make hallucinogens attractive to the patient.

A prompt response to a therapeutic trial with phenothiazines or barbiturates in an acutely intoxicated patient may also assist in the diagnosis.

Treatment

In the acutely intoxicated state, the patient should have an immediate trial with phenothiazine medication, preferably administered intramuscularly. The phenothiazines tend to block the action of LSD. Dosage will, of course, vary with the severity of the intoxication. Barbiturates also may be found useful in lieu of, or in addition to, phenothiazines. Caution relative to the additive effects of these drugs must be observed if they are used in combination. Once the period of intoxication is over, and if symptoms of mental illness are apparent, any medication prescribed should be on the same basis as for a similar type of mentally ill person who has not been involved with hallucinogens.

Drug dependence is a multifaceted problem, embracing almost every aspect of our culture and socioeconomic system. There is no simple solution for such a complex problem. The treatment and rehabilitation of the hallucinogen-dependent person also will require the attention of persons with special skills beyond those of the physician. There may be complicating legal, educational, social, moral, or religious issues which will require the services of other professionals.

Because the hallucinogens do not cause physical dependence, there are no physical complications of withdrawal. The physician, however, must determine at the onset of treatment whether other drugs are being taken simultaneously which require careful withdrawal management. Often this is so.

It may, on occasion, be necessary to hospitalize, at least briefly, a psychologically dependent person who is not acutely intoxicated or psychotic, to separate him from his source of supply. Complete cessation of the use of the drug is necessary. Circumstances may require the family or others to seek legal means by which the patient can be brought to treatment. There is wide variation among the states in regard to the civil commitment of the mentally ill, and it may be prudent to seek advice from attorneys as well as representatives of the medical profession on such questions.

The major focus of effective treatment cannot be on the drug intake alone, because dependence in its various forms is almost universally symptomatic of underlying personality problems, severe neurotic conflicts, or psychotic reactions interacting with environmental factors. The task of the treating physician is to learn from the patient *what*

really bothers him at both conscious and unconscious levels and what needs are being spuriously met at both these levels by taking drugs.

Then it becomes the physician's task to help the patient come to a full comprehension of his intrapsychic and interpersonal problems and how to cope with them. Short of this, the physician may have to give long-term supportive therapy that will enable the patient to live as productive and satisfying a life as possible with his psychic handicap and in a drug-free state.

The physician, of course, cannot change real vocational, family, social, and other environmental problems contributing to the patient's difficulty merely by treating his intrapsychic disorder. For this, as noted earlier, collaboration with others possessing additional pertinent skills is essential.

If the physician does not have sufficient professional training to equip him to handle these difficulties, early psychiatric referral may be indicated. When psychiatric resources are not available, the physician may be called upon to provide limited individual, group, or family therapy over an extended period of time. In such cases, it is particularly important to seek additional help in the community from the appropriate agencies, interested lay organizations, or concerned professionals who can add substance to the treatment program.

The physician should remember that the drug-dependent person (psychological, physical, or both) is sick and deserves understanding and treatment, even though he may have been involved in unlawful activity. While the hallucinogen user may resort to such activity to obtain his drug or become involved in unlawful behavior through his associations with others or as a consequence of taking drugs, the abuse of drugs is not necessarily equated with criminality, although several states make possession and use of hallucinogens a crime.

A concommitant consideration is that through the use of the drug a behavioral pattern may have been established in which the patient has experienced rejection by society and acceptance perhaps only by those with similar problems. He therefore may have alienated himself from more desirable associates and family, or perhaps may never have achieved a period of reasonably satisfactory adjustment to which he can return. Rehabilitation in all probability will require concerted community support, with simultaneous efforts to provide housing, employment, spiritual assistance, and other aids. Each patient presents a unique therapeutic problem calling for ingenuity on the part of all who endeavor to help.

Legal Control

The control of illicit distribution of drugs is an important aspect of prevention of drug dependence. Federal enforcement rests with the FDA under the Drug Abuse Control Amendments of 1965. Possession of hallucinogens outside of legitimate channels with intent to sell is illegal and, under any circumstances, unless the drug has been obtained legally, it is subject to seizure. An exemption is made for the use of peyote in bona fide religious ceremonies of the Native American Church.

State laws in the area of control are less uniform than those in relation to opiates and marihuana and in some instances are nonexistent. A few states cover peyote under their narcotic laws. Because hallucinogens are rarely administered by physicians, and then only in a carefully-controlled setting, their possession by a person for his own use would almost always be associated with abuse.

The Physician-Citizen's Role

Only an aroused and concerned public can create, mobilize, and implement resources to deal adequately with as serious a problem as drug dependence in all its forms. Education, which can provide the proper stimulus to accomplish this, must come from community leaders aware of the needs and from professionals who apply themselves to these needs.

Frank and forceful public discussion, focusing on the futility and inherent dangers in experimentation with drugs such as the hallucinogens and on the consequences of dependence, may deter the uninitiated from starting. Expanded counseling services in schools could provide more effective and more suitable alternatives to young people in dealing with their problems.

Persistent vigilance by law enforcement agencies in eliminating illegal sources of the drug needs public support and sufficient funds to do the job. Real crusading may be required before sufficient public and private funds are devoted to creating and operating adequate treatment facilities and programs for the afflicted and for the control of illicit drug use. And finally, only community understanding, compassion, interest, and active aid will enable the rehabilitated drug-dependent person to find a satisfactory place in society.

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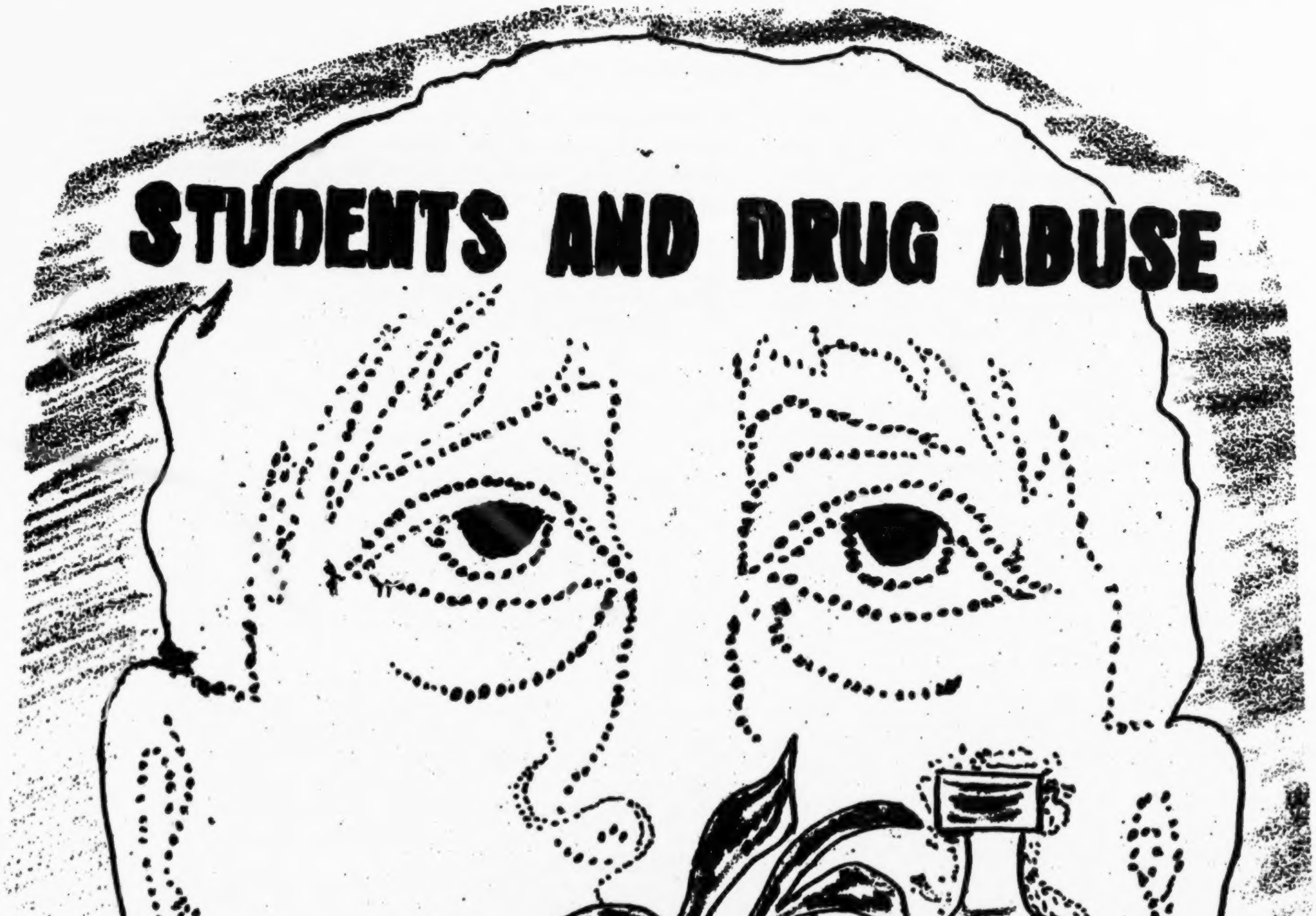
STUDENTS AND DRUG ABUSE



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TEACHING ABOUT DRUGS

• **Drug abuse is many things.** It is the heroin user injecting his bag of H, the Methedrine user high on "speed," the teen-ager smoking "pot," the 12-year-old sniffing model airplane glue. But it is also the adult starting his day with an amphetamine for needed "pick-me-up" and ending it with several drinks to "unwind" and a barbiturate to put him to sleep.

The problem of drug abuse reaches deeply into our values, aspirations, and fears. It is an emotionally charged area for almost all of us, making effective communication difficult. It is not surprising that teachers, who are being called upon increasingly to "do something" about growing drug use, are frustrated and troubled about how to go about it.

It is a task that demands extremely careful preparation and implementation. Yet most teachers have few resources with which to mount an effective drug abuse prevention program. Useful materials on the subject have been scarce. Further, where programs have been initiated to combat drug abuse, they have often been hampered by inadequate or inaccurate information. Few teachers have the necessary preparation for evaluating drug-oriented materials (and a great many words have been spoken and written about drugs that perpetuate myths).

This article contains brief summaries of factual information on the major drugs of abuse, and some hints that have proven helpful in communicating with young people who are thinking about drugs or have already experimented with them.

These suggestions are only an introduction to ways in which teachers can strengthen relationships of trust and understanding with students in this highly charged area, and open up dialogue and discussion—which is far more likely to influence youth attitudes and behavior than the lectures and sermons that all too often have marked the crusade against drugs.

To enhance their skills in the use of drug materials, teachers may seek opportunities for inservice training in drug abuse education. The resource materials that will be available from NIMH in the fall of 1969 will assist school systems in working up such programs.

Some concrete suggestions

Avoid Panic. Teachers are in a particularly good position to encourage parents, students, and the community to remain level-headed about drug abuse.

Drug abuse, like other forms of aberrant behavior, may have varying causes. For some, it may represent ill-advised experimentation; for others it may indicate basic or adolescent psychological problems. If a teacher has reason to believe that one of his students is experiencing serious emotional difficulties, consultation should be sought with the school counselor and a conference arranged with the parents with a view to obtaining professional help for the youngster. Some types of behavior that may be associated with serious problems include: loss of interest in school and social relationships with others, marked alteration in behavior, deterioration in physical and personal appearance, and the development of problems in dealing with school and parents. Since the reasons for drug use vary widely, so must the approaches to individual students.

While the teacher can play a role in referring suspected problems to the proper authorities, a panic reaction expressed either to the student or to a parent can serve only to alienate the student further and to confuse what should be straightforward, objective, and professional action if the student needs help.

This article was prepared by the Office of Communications and the Center for Studies of Narcotic and Drug Abuse, National Institute of Mental Health, in cooperation with the staff of TODAY'S EDUCATION. It is one of a series of publications planned by NIMH to help teachers deal more effectively with information on drug abuse.

The National Institute of Mental Health, Health Services and Mental Health Administration of the U.S. Department of Health, Education, and Welfare, is the principal Federal agency responsible for research on drug abuse. Through its Center for Studies of Narcotic and Drug Abuse, the Institute conducts a major program of support for research, training, and services dealing with the problem.

Recognizing the key role of schools in any drug prevention program, the NIMH during 1968–69 focused effort on the development of teacher training workshops. Under contract with the American Association of Health, Physical Education and Recreation, and National Science Teachers Association of the NEA, a two-week conference on drug abuse education was held in California for teachers from various parts of the Nation.

Subsequently, pilot inservice training workshops have been held in many States. Two-day preconvention seminars were also held in conjunction with the annual meetings of AAHPER and NSTA. The seminars included programs for teacher inservice training, presentation by authorities on the pharmacological, legal and psychosocial aspects of drugs, and evaluation of drug-oriented materials, both audio-visual and printed.

A number of materials to assist school systems in developing sound drug abuse prevention programs are being produced through this project. They will be available from the NIMH in the fall of 1969. The NIMH will welcome letters from teachers telling about innovative classroom approaches and the results they have achieved in communicating with students about the abuse of drugs. Address letters to the Assistant to the Director for Drug Abuse Education, Office of Communications, NIMH, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

A limited number of copies of this article are available from Box 1080, National Institute of Mental Health, Washington, D.C. 20013. Quantity copies for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402—Price: 25 cents

Keep Lines of Communication Open. Encouraging an atmosphere in which the student feels free to confide in parents and teachers and to discuss his concerns is an important first step. Obviously, the size of present classes often makes personal contact difficult. At the same time, if the student realizes that his parents and teachers are making a genuine effort to understand his point of view, this realization is likely to help him in the process of growing up. Although it's sometimes difficult, it's important to avoid being moralistic and judgmental in talking about drugs and drug users.

Many adults, including teachers, feel uncomfortable and defensive about discussing drugs with teen-agers. This is sometimes due to awareness of our own inconsistencies in the use of everyday substances like tobacco and alcohol. Nevertheless, there are good and convincing arguments against the use of drugs which can be stated in terms that are persuasive to youth. For example, some teen-agers see the use of drugs as one way of developing heightened self-awareness or of enhancing their inner freedom. Pointing out the difficulty of achieving these goals if they become drug-dependent may help them realize the fallacy of this viewpoint. Similarly, if young people are to improve the society of which they are critical, they can only do so by remaining a part of it rather than by chemically "copping out."

Avoid "Scare" Techniques. Use of sensational accounts or scare techniques in trying to discourage drug experimentation is usually ineffective because the teen-ager's direct knowledge frequently contradicts them. Teen-agers are demanding—and are entitled to—honest and accurate answers. Given the facts, youngsters often quickly respond. The apparent decline in LSD usage, for example, is believed to be related to the well-publicized reports of possible adverse psychological and potential biological hazards.

It is impossible to eliminate or legislate away all possible substances of abuse. The individual decides for himself whether to use or not use drugs. To be effective, prevention ultimately must be based on each student's decision not to use drugs because they are incompatible with his personal goals. Emphasizing that no authority, whether school official or police officer, can make that ultimate decision for him may help the youngster clarify his personal responsibility. It may also help to reduce the adolescent tendency to view drug abuse as an act of rebellion.

Because the abuse of drugs frequently carries with it heavy legal penalties, it is important that youngsters be aware of the possible long-term results of their behavior. While this should not be the primary emphasis, the legal and social implications over a lifetime should be indicated as two of the essential factors to be taken into consideration in any decision to use or not use drugs. Some young people, feeling keenly that certain drug laws are unjust, advocate violating them. Thoughtful discussion of the implications of such violation and of whether the use of drugs is sufficiently important to them to justify such extreme measures may be helpful.

Avoid Creating an Atmosphere of Distrust and Suspicion. Like many parents, some teachers, anxious to discourage drug abuse, are likely to assume that *any* departure from the preferred styles and customs of the majority is indicative of drug abuse. Youngsters who have tried or are using drugs come in all sizes and shapes—with short as well as long hair, and conventional clothes as well as eccentric dress. So do those who don't use drugs.

By equating unconventional appearance with drug abuse, we may encourage the very behavior we're trying to avoid. At a minimum, the youngster is likely to feel that the conventional world is completely opposed to any originality or creativity that does not fit a common mold and that the price of acceptance is complete conformity. While his external appearance may conform to the norm there is no assurance that the drug abuse will not become his private mode of rebellion.

Since the problem of teen-age drug abuse embraces a wider range of substances than those prohibited by law, even an attitude of active suspicion and continuous surveillance, were that possible, would not eliminate the problem. It would, however, almost certainly destroy the climate of trust and confidence essential to the inter-generational communication that is desirable in preventing abuse.

Avoid Drug Stereotypes. Many of us, when we think about the drug misuser, immediately think of some more or less vague stereotype of "the addict." Similarly, we often tend to think of all the misused drugs as being generally alike. Nothing could be further from the truth. Present evidence suggests that the vast majority of youngsters who experiment with marihuana, the most popular illegal drug of abuse, do so on a one-time, experimental basis.

Drugs differ widely in their chemical composition and, more important, perhaps, in their effects—depending upon the personality of the user and the circumstances of use. The person who misuses drugs may vary from the onetime user experimenting out of curiosity to the chronic, heavy user who is psychologically dependent on a drug. While some types of drug misuse may be fairly apparent even to the untrained observer, other types may be so subtle as to escape the detection of even the expert.

Although some drug users go on to the use of more potent types of drugs, many others do not. Just why some users become dependent on particular drugs and others do not is not very clearly understood. It may be related to personality development, but physiological factors may also play a role. While a physical dependency on the drug plays some role, psychological dependence appears to be more important. Physical dependence on heroin, for example, can be cured in a relatively short time; yet the heroin addict has a very difficult time avoiding using the drug again upon discharge from treatment.

Be Well-Informed Yourself About Drugs. Much information is available about the drug problem—some of it accurate and useful. But unfortunately much of what is published tends to be overdramatized and frequently inaccurate.

Much of the controversy over the effects of marihuana and its control, for example, results from overinterpretation or misinterpretation of what little data are presently available. Drug-use advocates frequently use the scarcity of scientifically reliable information as a basis for arguing that marihuana and other drugs are harmless. The absence of complete agreement based on reliable evidence that a substance is harmful does not, of course, demonstrate its harmlessness. Often, relatively long-term use of a substance is required before its public health implications are apparent. Cigarette smoking provides an obvious and apt example. While American experience with marihuana is of relatively short duration, foreign research studies, though often difficult to interpret, suggest that long-term use of marihuana may be detrimental to the health of the users.

A discussion of the implications of various social policies regarding marihuana and public health is one approach that may enable you to reach your students. The social problems of adding another intoxicant of unknown long-range implications to our present difficulties with alcohol may be the subject of profitable discussion. Another topic which might stimulate good discussions among intelligent youngsters and their teachers is the problem of allowing a harmful drug to become popular and then subsequently making it illegal. It might also be productive to discuss some of the originally unsuspected deleterious effects of drugs, such as the birth defects resulting from use of Thalidomide.

Use Drug Education Materials as a Springboard to Discussion. Even good films, pamphlets, and other materials need to be made personally relevant to students. This can usually be done best through discussion. As teachers skilled in classroom discussion are well aware, much of the art of effective discussion requires that the teacher be a thoughtful and responsive listener as well as a catalyst.

The arguments (often heated) of the student who advocates use of drugs deserve a hearing and, when appropriate, a considered rebuttal. Often a teen-ager's apparent conviction masks considerable uncertainty about the worth of his arguments, which are frequently offered to test their validity and/or the honesty of the teacher. Summarily rejecting the advocate's points may alter his classroom verbal behavior but it is unlikely to change his thinking. The most probable result of an arbitrary "put down" will be to convince the youngster that adult objections to drug use are merely prejudices.

A student-run discussion on prevention of drug abuse may be even more effective. Teen-agers are frequently far more responsive to the mores and values of their own group than they are to the values of the adult world. Former drug abusers can often be highly effective in communicating with a student group—they can "tell it like it is!"

Use by teachers and parents of alcohol and tobacco is of more than casual interest to teen-agers—all too often this is the thrust of their argument in favor of marihuana. In addition, the problem of compulsive overeating may be discussed as similar to drug dependence. Habits, such as smoking and drinking and even compulsive overeating, can readily serve to illustrate the highly persistent nature of habitual behavior despite strong rational grounds for change.

As adults we can also serve to demonstrate that it is possible to live an involved, truly meaningful life without the use of chemical substances to add meaning or excitement. The adult who is himself "turned on" by life without recourse to drugs is one of the best advertisements for that type of life.

Alternatives to drug use

Youngsters who find satisfaction in other activities are less likely to find *regular* use of drugs appealing. Aware of this, the teacher may open up for individual or classroom discussion ways in which students are or can become involved in activities that have personal meaning for them.

Many young people, while attempting to appear blasé or uninvolved, feel keenly the problems of our contemporary world, and opportunities for active involvement, such as work with a political party, or a program for slum children, might be encouraged. While a strong interest in other activities may not deter a student from experimenting with drugs, he is less likely to adopt habitual drug use if he feels "turned on" by shared and constructive human experiences.

Adolescence is a lonely time for many youngsters. The teen-ager who is unable to find his place in some orthodox group sometimes turns to drug use as a means of finding a kind of group acceptance. The student who is isolated from others or having more than the usual difficulties in gaining acceptance will sometimes respond very well to a special interest shown by one of his teachers. Even when the teacher is unable to solve a problem, he may serve as a necessary bridge in helping the student get assistance from some specialized professional source. Particularly for the student with a poor home situation, a sympathetic teacher can provide a model of an understanding adult who has no need to escape into a state of drugged unreality.

To help teachers and students equip themselves with the facts about drugs that are abused, simple question-and-answer sequences are presented on the following pages. These provide the latest information on marihuana, the up-and-down drugs (amphetamines and barbiturates), LSD, and drugs medically defined as narcotics. The material may be used as background information in developing classroom or small group discussions leading toward constructive personal decisionmaking regarding the use of drugs.

Wherever possible, discussions of drug abuse should be integrated into the general curriculum rather than limited to a specific drug abuse unit or lecture.

FACTS ABOUT DRUGS

What Is MARIHUANA?

• Marihuana is a drug found in the flowering tops and leaves of the female Indian hemp plant, *cannabis sativa.* The plant grows in mild climates around the world, especially in Mexico, Africa, India, and the Middle East. It also grows in the United States, where the drug is known by such names as "pot," "tea," "grass," "weed," and "Mary Jane."

The drug is made by crushing or chopping into small pieces the dried leaves and flowers of the plant. This green product is usually rolled and smoked in short cigarettes or pipes, or it can be eaten mixed with food. The cigarettes are commonly known as "reefers," "joints," and "sticks." The smoke from marihuana is harsh and smells like burnt rope or dried grasses. Its sweetish odor is easily recognized.

The strength of the drug differs from place to place, depending on where and how it is grown, how it is prepared for use, and how it is stored. The marihuana available in the United States is much weaker than the kind grown in Asia, Africa, or the Middle East.

What is its use?

Marihuana is one of the least understood of all natural drugs, although it has been known for nearly 5,000 years. According to a UN survey, it has been most widely used in Asia and Africa. Very early in history, the Chinese used it to relieve pain during surgery, and the people of India used it as a medicine. Today it

The Facts on Drugs presented here are available for distribution to students in the form of individual fliers on Marihuana, LSD, the Up and Down Drugs, and Narcotics. A limited number of sample copies are available free from Box 1080, National Institute of Mental Health, Washington, D.C. 20013. Fliers can be ordered in quantity from the Government Printing Office, Washington, D.C. 20402 at 5¢ apiece, $3.25 per hundred for those on LSD (#1828), Up and Down Drugs (#1830), Narcotics (#1827); $3.75 per hundred for the flier on Marihuana (#1829).

is used mainly for its intoxicating effects and has no known use in modern medicine.

Traffic in and use of drugs from the cannabis plant are now legally restricted in nearly every civilized country in the world, including countries where marihuana is used in religious ceremonies or as a native medicine.

How widely is it used in the United States?

The use of marihuana as an intoxicating drug was introduced in the United States in 1920. In 1937, the Federal Marihuana Tax Act outlawed its general use and every State followed with strict laws and enforcement. In the mid-1960's, authorities reported a sharp increase in the use of marihuana. Arrests on marihuana charges have more than doubled since 1960, according to the President's Commission on Law Enforcement and Administration of Justice.

No one knows the exact extent of marihuana use in the United States. Some health authorities believe that 4 to 5 million Americans may have used the drug at least once in their lives. Other estimates are as high as 20 million. Research studies are under way to determine more precisely just how widely the drug is used.

How does the drug work?

When smoked, marihuana quickly enters the bloodstream and acts on the brain and nervous system. It affects the user's mood and thinking, but medical science still has not discovered just how the drug works in the body, what pathway it takes to the brain, and how it produces its effects. Some scientists report that the drug accumulates in the liver. Because it may cause hallucinations when taken in very large doses, it is classed as a mild hallucinogen.

What are its physical effects?

The long-term physical effects of taking marihuana are not yet known because no one has done the kind of research needed to learn the results of chronic use. The more obvious physical reactions include rapid heartbeat, lowering of the body temperature, and sometimes reddening of the eyes. The drug also changes blood sugar levels, stimulates the appetite, and dehydrates the body. Users may get talkative, loud, unsteady, or drowsy and find it hard to coordinate their movements.

What are its other effects?

The drug's effects on the emotions and senses vary widely, depending on the amount and strength of the marihuana used. The social setting in which it is taken and what the user expects also influence his reaction to the drug.

Usually, when smoked, the drug effect is felt quickly—about 15 minutes after inhaling the smoke of the cigarette. Its effects can last from two to four hours. The range of effects can vary from depression to a feeling of excitement. Some users, however, experience no change of mood at all. The sense of time and distance of many users frequently becomes distorted. A minute may seem like an hour. Something near may seem far away.

How does marihuana affect judgment?

A person using marihuana finds it harder to make decisions that require clear thinking, and he finds himself more responsive to other people's suggestions. The drug has an adverse effect on any task that takes good reflexes and thinking. For this reason it is dangerous to drive while under the influence of the drug.

What are the latest findings about the drug?

Working with man-made tetrahydrocannabinol, one of the active ingredients of marihuana, a leading scientist recently found that high dosages of the drug brought on severe reactions in every person tested. The National Institute of Mental Health study also showed that psychotic reactions sometimes occur, for unknown reasons, in some individuals who take smaller amounts.

The scientist observed that a dose equal to one cigarette of the United States type can make the smoker feel excited or silly. After an amount equal to four cigarettes, the user's perceptions change. Colors seem brighter, and hearing seems keener. After a dose equal to 10 cigarettes, other reactions set in. The user experiences visual hallucinations (seeing things that are not there), illusions (seeing or imagining shapes in objects that are not there), or delusions (beliefs not based in reality). His mood may swing from great joy to extreme anxiety. He may become deeply depressed, or have feelings of uneasiness, panic, or fear.

Is marihuana addicting?

Authorities now think in terms of drug "dependence" rather than "addiction." Marihuana, which is not a narcotic, does not cause physical dependence as does heroin or other narcotics. This means that the body does not become dependent on continuing use of the drug. Neither does the body, probably, develop a tolerance to the drug, which would make larger and larger doses necessary to get the same effects. Withdrawal from marihuana does not produce physical sickness.

A number of scientists think the drug can cause psychological dependence, however, if its users take it regularly. All researchers agree that more knowledge of the physical, personal, and social consequences of marihuana use is needed before more factual statements can be made.

Does it lead to use of narcotics?

A 1967 Lexington study of narcotic addicts from city areas showed that more than 80 percent had previously used marihuana. Of the much larger number of persons who use marihuana, scientists agree that few go on to use morphine or heroin. No direct cause-and-effect link between the use of marihuana and narcotics has been found. Researchers point out, however, that a person predisposed to abuse one drug may be likely to abuse other, stronger drugs. Also, users of one illicit drug may be exposed to a variety of them through contacts with drug sellers and other users.

What are the laws dealing with marihuana?

Under federal law, which classifies marihuana as a narcotic, to have, give, or sell marihuana in the United States is a felony. Federal laws and many State laws deal with the drug as severely as if it were a narcotic.

The Federal penalty for possessing the drug is 2 to 10 years imprisonment for the first offense, 5 to 20 years for the second offense, and 10 to 40 years for further offenses. Fines of up to $20,000 for the first or subsequent offenses may be imposed

State laws also control the illicit use of these drugs. For transfer or sale of the drug, the first offense may bring a 5- to 20-year sentence and fine of up to $20,000; two or more offenses, 10 to 40 years in prison. If a person over 18 sells to a minor under 18 years of age, he is subect to a fine of up to $20,000 and/or 10 to 40 years in prison for the first offense, with no suspension of sentence and no probation or parole.

What are the special risks for young users?

Breaking the laws that deal with marihuana can have serious effects on the lives of young people. They may find their education interrupted and their future shadowed or altered by having a police record. A conviction for a felony can complicate their lives and plans at many turns. It can prevent a person from being able to enter a profession, such as medicine, law, or teaching. It can make it difficult for him to get a responsible position in business or industry. Special individual evaluation is necessary to obtain a government job. Before a student tries marihuana, he should know these facts.

Experts on human growth and development point out other risks. They say that a more subtle result of drug abuse on the young person is its effect on his personality growth and development. For young people to experiment with drugs at a time when they are going through a period of many changes in their transition to adulthood is a seriously questionable practice.

"It can be especially disturbing to a young person who is already having enough of a task getting adjusted to life and establishing his values," says an NIMH scientist engaged in studies of young marihuana users.

Another reason for caution is the lack of scientific evidence to support statements being reported by students that the use of marihuana is "medically safe." It is hoped that research now under way may add to the little currently known about the effects of the use of marihuana.

Why is so little known about the drug?

Medical science does not yet know enough about the effects of marihuana use because its active ingredient—tetrahydrocannabinol—was not available in pure form until recently. In the summer of 1966, the chemical, first synthesized by an NIMH-supported scientist in Israel, was made available for research purposes. Now for the first time researchers can accurately measure the drug's effects and study its short- and long-term action on the body.

What research is being done?

The National Institute of Mental Health, an agency of the Public Health Service, is responsible for supporting and conducting research to learn more about marihuana and to present this knowledge to the public.

The program of the NIMH Center for Studies of Narcotic and Drug Abuse includes surveys of how people get the drug, how widely students and others use it, and what physical and psychological effects different amounts and periods of use have upon people. With NIMH support, scientists are now studying the special drug qualities of marihuana and its physical effects.

The NIMH Addiction Research Center in Lexington, Kentucky, is developing studies to discover exactly how marihuana affects memory, perception (or awareness), mood, and physical movement. Other studies are planned to learn more about the drug's long-range effects on the body and mind.

AMPHETAMINES AND BARBITURATES

The UP and DOWN Drugs

• Amphetamines, which first became available for medical use in the 1930's, are stimulants to the central nervous system and are best known for their ability to combat fatigue and sleepiness They are also sometimes used to curb appetite in medically supervised weight-reduction programs. The most commonly used stimulants are amphetamine (Benzedrine), dextroamphetamine (Dexedrine), and methamphetamine (Methedrine). Slang terms for these drugs include "pep pills," "bennies," and "speed."

How do these drugs affect mood?

When properly prescribed by a physician, moderate doses can check fatigue and produce feelings of alertness, self-confidence, and well-being. In some people, this is followed by a letdown feeling or depression hangover. Heavier doses cause jitteriness irritability, unclear speech, and tension. People on very large doses of amphetamines appear withdrawn, with their emotions dulled. They seem unable to organize their thinking.

What are the physical effects?

Stimulant drugs increase the heart rate; raise the blood pressure; cause palpitations (throbbing heart and rapid breathing); dilate the pupils; and cause dry mouth, sweating, headache, diarrhea, and pallor. They also depress the appetite.

How do these stimulants work?

Scientists have found that in the body these drugs stimulate the release of norepinephrine (a substance stored in nerve endings) and concentrate it in the higher centers of the brain. This speeds up the action of the heart and the metabolic process through which the body converts food into the chemicals it needs.

What are the medical uses?

Amphetamines were first used to treat colds, because they shrink the nasal membranes and can give temporary relief for "stuffy" heads. More effective drugs with fewer side effects are now used for this purpose. Stimulants are now mainly prescribed for narcolepsy (overwhelming attacks of sleep), depression, and weight control. Use of these drugs as appetite depressants or for any other purposes is advisable only under the supervision of a physician, since stimulants can produce unwanted reactions. Doctors also prescribe these drugs for fliers, astronauts, and others who can use them as medically directed to ward off fatigue during dangerous and prolonged tasks.

Are stimulants misused?

About 20 percent of all medical prescriptions for mood-affecting drugs involve stimulants, according to a national survey. The drug industry produces enough each year to provide each American with 25 doses of these drugs. The Food and Drug Administration reports that about half of this supply enters illegal channels, for nonprescribed use. Black-market laboratories also produce stimulants, which are easily obtained from illegal sources.

All kinds of people abuse drugs—from the middle-aged businessman or housewife to students, athletes, and truck drivers. Recent government surveys show that young people are becoming the greatest abusers of these drugs. Drivers take them to stay awake on long trips, students take them while cramming for exams, and athletes take them, although sporting associations have banned their use. Some try them for a temporary kick. Some abusers reach a point where they need both stimulant and sedative drugs to get a chemical "up" and a chemical "down."

The stimulant drugs are generally swallowed as pills, but can be taken in liquid form by injection into a vein at regular time intervals. This is a dangerous practice known among abusers as "speeding."

Are these stimulants addicting?

Benzedrine, Dexedrine, and other stimulant drugs do not produce physical dependence as do the narcotics. Although the body does not become physically dependent on their continued use, it does develop a tolerance to these drugs so that larger and larger doses are required to feel the effects.

There is another kind of dependence medical authorities note in connection with the abuse of stimulants. They call it psychological dependence, meaning that a practice can become a habit for mental or emotional reasons, with the person getting used to and turning to the drug for its effects.

How dangerous are stimulant drugs?

These drugs can drive a person to do things beyond his physical endurance that leave him exhausted. Heavy doses may cause a temporary toxic psychosis (mental derangement) which requires hospitalization. This is usually accompanied by auditory and visual hallucinations. Abruptly withdrawing the drug from the heavy abuser can result in a deep and suicidal depression.

Long-term heavy users of the amphetamines are usually irritable and unstable and, like other heavy drug users, they show varying degrees of social, intellectual, and emotional breakdown.

Dangers from injecting "speed" (methamphetamine) into the vein include serum hepatitis, abcesses, and even death in the case of unaccustomed high doses. Injection of "speed" causes abnormal heart rates and may result in serious psychotic states and long-term personality disorders.

What are sedatives?

The sedatives belong to a large family of drugs manufactured for medical purposes to relax the central nervous system. Of these, the best known are the barbiturates, made from barbituric acid, which was first produced in 1846.

Barbiturates range from the short-acting, fast-starting pentobarbital sodium (Nembutal) and secobarbital

sodium (Seconal) to the long-acting, slow-starting phenobarbital (Luminal), amobarbital (Amytal), and butabarbital (Butisol). The short-acting preparations are the ones most commonly abused. The slang terms for these include "barbs" and "goof balls."

How widely are they used?

Recent surveys show that, of all the prescriptions doctors write for mood-affecting drugs, one in four is for a barbiturate.

Probably an equally large supply of these drugs is obtained illegally, without prescription.

What are their medical uses?

Doctors prescribe sedatives widely to treat high blood pressure, epilepsy, and insomnia; to diagnose and treat mental illness; and to relax patients before and during surgery. Alone or together with other drugs, they are prescribed for many types of illnesses and conditions.

Misuse of Drugs

WHEREAS, The misuse of the many drugs such as the amphetamines, barbiturates, tranquilizers and the misuse of the so-called "harmful substances" such as glue and other similar aromatic products remains a continuing problem; and

WHEREAS, Juvenile drug arrests have increased tremendously in the past several years; therefore be it

Resolved, That the dangers of misusing and the advantages of correctly using drugs should be taught to all children; and therefore be it further

Resolved, That such education should be a continuing important part of the total curriculum of Health Education.

—A resolution adopted by the Joint Committee on Health Problems in Education of the NEA and the American Medical Association, 1967.

What are their effects?

Taken in normal, medically supervised doses, barbiturates mildly depress the action of the nerves, skeletal muscles, and the heart muscle. They slow down the heart rate and breathing, and lower the blood pressure.

But in higher doses, the effects resemble drunkenness: confusion, slurred speech, and staggering. The ability to think, to concentrate, and to work is impaired, and emotional control is weakened. Users may become irritable, angry, and combative. Finally, they may fall into deep sleep.

Is barbiturate use dangerous?

Authorities consider the barbiturates highly dangerous when taken without medical advice and prescription. Because doctors commonly prescribe these drugs, many people mistakenly consider them safe to use freely and as they choose. They are not. Overdose can cause death.

Barbiturates distort how people see things and slow down their reactions and responses. They are an important cause of automobile accidents, especially when taken together with alcohol. Barbiturates tend to heighten the effects of alcohol.

Users may react to the drug more strongly at one time than at another. They may become confused about how many pills they have taken and die of an accidental overdose. Barbiturates are a leading cause of accidental poison deaths in the United States. They are also one of the main means people use to commit suicide.

Are barbiturates addicting?

Yes. These drugs are physically addicting. Some experts consider barbiturate addiction more difficult to cure than a narcotic dependency. The body needs increasingly higher doses to feel their effects. If the drug is withdrawn abruptly, the user suffers withdrawal sickness with cramps, nausea, delirium, and convulsions, and in some cases, sudden death. Therefore, withdrawal should take place in a hospital over a period of several weeks on gradually reduced dosages. It takes several months for the body to return to normal.

What are the legal controls?

The Bureau of Narcotics and Dangerous Drugs in the Department of Justice regulates stimulant and depressant drugs. Regulations provide for a strict accounting of all supplies of drugs by the manufacturer, distributor, and seller, and restrict the user to five refills of any one prescription. This means that these drugs can be had legally only through a doctor. Illicit manufacturing, distributing, dispensing, and possession of stimulants and depressants with intent to sell can bring a fine of up to $10,000 and a prison sentence of up to five years. Persons over 18 convicted of selling these drugs to persons under 21 can be fined $15,000 and receive 10 years in jail. Second and subsequent sales of these drugs to minors may yield a fine of $20,000 and 15 years in jail. Illegal possession without intent to sell can bring a fine of $1,000 and/or imprisonment for one year. State laws also control illicit use of these drugs.

What research is being done?

The National Institute of Mental Health is the federal agency primarily responsible for research on drug addiction and abuse. It is conducting extensive animal research to uncover the underlying action of the up-and-down drugs and to try to find out how psychological or physical dependence develops. It is searching for new drugs and techniques to treat overuse and dependence on the amphetamines and the barbiturates. Some investigators are developing new tests to detect these drugs in the body.

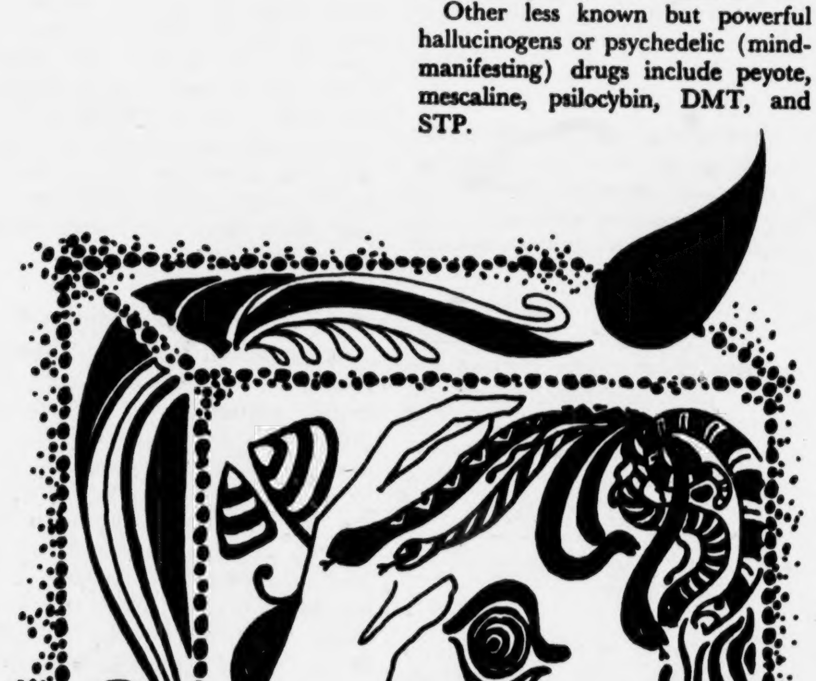
In addition, the NIMH is supporting a number of surveys to determine the use of these drugs by various population groups. Research investigators are trying in particular to learn how young people become involved in drug abuse and what can be done to help prevent this.

What Is LSD?

• A powerful man-made chemical, D-lysergic acid diethylamide, generally called LSD, was first developed in 1938 from one of the ergot alkaloids. Ergot is a fungus that grows as a rust on rye and other cereals. LSD is so powerful that a single ounce is enough to provide 300,000 average doses.

Legally classified as a hallucinogen—a mind-affecting drug—LSD is noted mainly for producing strong and bizarre mental reactions in people, and striking distortions in their physical senses, in what and how they see, touch, smell, and hear. Except for government-approved use for research, the drug is illegal in the United States. Yet it is unlawfully produced in makeshift laboratories, and many people, including up to 7 percent of the students on some campuses, have taken it.

Other less known but powerful hallucinogens or psychedelic (mind-manifesting) drugs include peyote, mescaline, psilocybin, DMT, and STP.



Why do people take LSD?

Reasons given by users for taking LSD include: "curiosity," "for kicks," "to understand myself better," or a quest for religious or philosophical insights. At various times in history, substances as diverse as alcohol, ether, opium, and nitrous oxide (so-called laughing gas) have also been claimed capable of providing an easy and instant path to wisdom, or to religious or philosophical insights. Today these "consciousness expanders" of an earlier day are regarded as merely commonplace substances without any mystical properties whatever.

Recent surveys and hospital reports show that the drug's popularity may be dropping, at least in some areas of the country, as its potential ill effects become better known.

What are its physical effects?

An average dose of LSD, amounting to a speck, has an effect that usually lasts from about 8 to 10 hours. Users take it in capsule form or in a sugar cube, cracker, or cookie, or they can lick it off a stamp or other object impregnated with the drug. It increases the pulse and heart rate. It also causes a rise in blood pressure and temperature, dilated eye pupils, shaking of the hands and feet, cold sweaty palms, a flushed face or paleness, shivering, chills with goose pimples, irregular breathing, nausea, and loss of appetite.

The drug is not physically addicting in the way that narcotics are. That is, the body does not develop a physical need for LSD or physical sickness when it is withdrawn.

What are its psychological effects?

People who use LSD say that it has a number of effects. The first effects, they indicate, are likely to be sudden changes in their physical senses. Walls may appear to move; colors seem stronger and more brilliant. Users are likely to "see" unusual patterns unfolding before them. Flat objects seem to stand out in three dimensions. Taste, smell, hearing, and touch seem more acute. One sensory impression may be translated or merged into another; for example, music may appear as a color, and colors may seem to have taste.

One of the most confusing yet common reactions among users is the feeling of two strong and opposite emotions at the same time—they can feel both happy and sad at once or relaxed and tense. Arms may feel both heavy and light at the same time.

Users also report a sensation of losing the normal feeling of boundaries between body and space. Sometimes they believe they can fly or float with ease.

Effects can be different at different times in the same individual. Researchers have found that even in carefully controlled studies responses to the drug cannot be predicted. For this reason, users refer to "good trips" or "bad trips" to describe their experiences.

Does the drug affect thinking?

Among LSD's other effects on the user is the loss of his sense of time. He doesn't know how much time is passing, but he does remain conscious. Scientists report that he can reason logically, up to a point, while undergoing the drug's effects. He usually remembers after the drug wears off much of what happened to him. He may, for example, have become fascinated with an object in the room, like a chair or a vase. On larger doses, he may feel mystical and report a sense of rebirth or new insights. But he is often unable to explain his experience to others. Many medical authorities feel that chronic or continued use of LSD changes values and impairs the user's powers of concentration and ability to think. This may lead to a tendency to drop out of society.

Does LSD increase creativity?

Some users believe that LSD can heighten their senses, and help to make them more creative. But studies of paintings, writings, and other works produced by drug users have failed to support this viewpoint. In many cases, works performed by people after they used LSD appeared to be noticeably poorer than before.

How does the drug act?

Just how LSD works in the body is not yet known. But it seems to affect the levels of certain chemicals in the brain and to produce changes in the brain's electrical activity.

Animal experiments with LSD suggest that the brain's normal filtering and screening-out process becomes blocked, causing the brain to become flooded with unselected sights and sounds.

Studies of chronic LSD users indicate that they continue to suffer from an overload of stimulation to their senses. Researchers believe this may explain the regular user's inability to think clearly and to concentrate on a goal.

Is LSD dangerous?

Recent reports from hospitals in areas where LSD is used without close medical supervision warn of definite dangers. These dangers include:

1. Panic. Because he cannot stop the drug's action, the user may get panicky and fear that he is losing his mind.
2. Paranoia. He may become increasingly suspicious, feeling that someone is trying to harm him or control his thinking. This feeling generally lasts 72 hours after the drug has worn off.
3. Recurrence. Days, weeks, or even months after the individual has stopped using LSD, the things he saw and felt while on the drug may recur and make him fear he is going insane.
4. Accidental death. Because the LSD user may feel that he can fly or float in the air, he may try to leap out of a high window or from other heights and fall to his death. Or he may drive or walk in front of a moving car because he thinks he can't be harmed.

Does LSD cause mental illness?

Reactions resulting from use of LSD range from great worry, panic, and deep depression to borderline and severe mental derangement. Medical experts point out that the overwhelming worries and fears that can accompany the LSD experience are sometimes disturbing enough to cause acute and even long-lasting mental illness.

Does LSD cause birth defects?

A number of investigators are studying the effects of LSD on chromosomes. These are the tiny threads of matter in the nucleus of every cell that carry genetic or hereditary information and guide reproduction. Several scientists have reported that the drug causes chromosomal damage or changes when it is added to a tissue culture of white blood cells. Others report that the chromosomes of individuals who presumably have taken LSD show unusual breaks. They warn that this may possibly cause abnormalities in the offspring of LSD users.

Some researchers have reported fetal damage when LSD was given to pregnant rats and mice, and others have described human birth defects in newborns whose mothers said they took LSD.

No conclusive or direct link has yet been found between LSD and chromosomal breaks, nor has it been found that such breaks cause birth defects. Some changes in the cells are temporary and not permanent. But the preliminary evidence is arousing the concern of scientists.

Until further research throws more light on the question, medical authorities warn that the drug must be considered a definite risk, and women of child-bearing age are particularly advised not to use the drug.

Are there special hazards for young users?

The strong sensations and clash of moods the drug causes can be frightening, even for a mature person. For young people who are still undergoing emotional development and who seek a realistic hold on ways of solving problems and ways of living, the effects of LSD can be even more frightening and confusing. The growing brain is more vulnerable than the adult brain to all mind-altering drugs.

Does LSD have medical uses?

The drug has been tested widely as a possible treatment for mental and emotional illnesses, and for alcoholism. In studies so far, it has failed to help the severely ill. But under controlled conditions, neurotics and alcoholics have made some improvement, according to investigators. The work is not complete, but follow-up studies indicate that these improvements are not always lasting.

The drug is a valuable tool in biomedical research, but its therapeutic value may be limited to special cases.

How does the law view LSD?

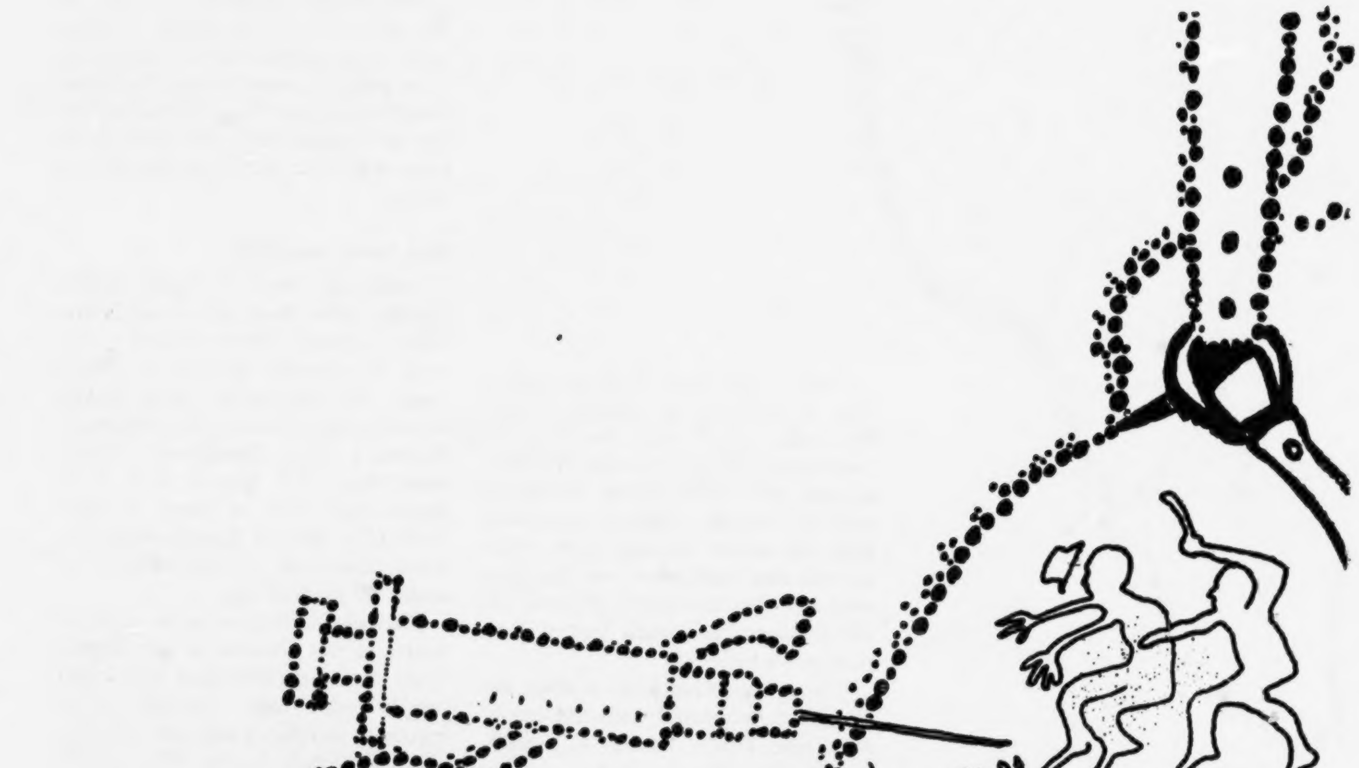
Because LSD is a dangerous drug when not used for research under medical supervision, it is closely regulated by the Bureau of Narcotics and Dangerous Drugs, Department of Justice. The law provides strict penalties for anyone who illegally produces, sells, possesses with intent to sell, or disposes of dangerous drugs like LSD. Conviction can bring a fine of $10,000 and/or imprisonment for up to five years. For persons over 18 years of age who sell or give drugs to anyone under 21, the law provides a penalty of up to 10 years in jail and a fine of up to $15,000. Second and subsequent such offenses may be penalized by up to 15 years imprisonment and/or a $20,000 fine. Merely possessing this drug illegally without intention of selling it can bring a fine of $1,000 and/or one year in prison. Some state laws are even more severe.

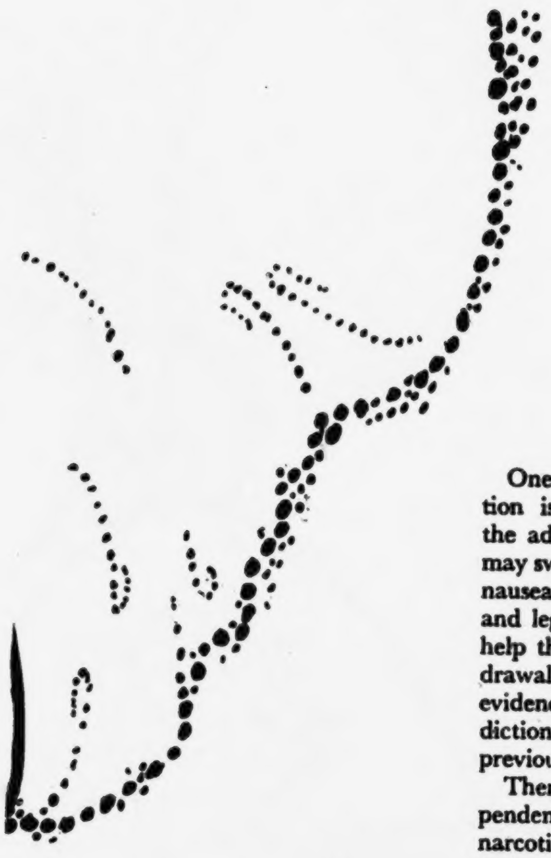
What are NIMH activities in LSD?

The National Institute of Mental Health is the primary federal agency responsible for supporting and overseeing research on LSD. It possesses the only legal supply of the drug in the United States. The NIMH Center for Studies of Narcotic and Drug Abuse is currently supporting 58 research projects which include surveys of the extent of the use of LSD by students and by the general population; LSD's biological, psychological, and genetic effects in animals and in humans; basic studies to explain the drug's action and to chart its course through the body; and long-range projects to study LSD users and their culture.

Investigators are about to complete a series of studies to determine the value of the drug as a treatment for alcoholism and emotional problems, and as a way to provide some mental relief for persons with terminal illness. They are also searching for new ways to treat people who suffer from the drug's bad side effects.

Research in this area is expected to grow until science has found more answers to the many questions LSD has raised.





What Are NARCOTIC Drugs?

• The term narcotic refers, generally, to opium and pain-killing drugs made from opium, such as heroin, morphine, paregoric, and codeine. These and other opiates are obtained from the juice of the poppy fruit. Several synthetic drugs, such as Demerol and Dolophine, are also classed as narcotics. Opiates are widely used in medicine as pain killers. Cocaine, made from coca leaves, and marihuana are classified legally but not chemically as narcotic drugs.

Since heroin appears to be the narcotic used by most addicts today, the following questions and answers deal mainly with heroin.

What is narcotic addiction?

When the abuser of a narcotic gets "hooked"—meaning addicted—his body requires repeated and larger doses of the drug. Once the habit starts, larger and larger doses are required to get the same effects. This happens because the body develops a tolerance for the drug.

One of the signs of heroin addiction is withdrawal sickness. When the addict stops using the drug, he may sweat, shake, get chills, diarrhea, nausea, and suffer sharp abdominal and leg cramps. Modern treatments help the addict through these withdrawal stages. Science now has new evidence that the body's physical addiction may last much longer than previously believed.

There is another kind of drug dependence connected with the use of narcotics. This is known as psychological dependence. That is, taking the drug also becomes a habit for emotional reasons. For example, the addict comes to depend on the drug as a way to escape facing life.

Narcotic use can become even more of an escape than expected, because large or unexpectedly pure doses can—and not uncommonly do—result in death.

What is the effect of heroin?

Typically, the first emotional reaction to heroin is reduction of tension, easing of fears, and relief from worry. Feeling "high" may be followed by a period of inactivity bordering on stupor.

Heroin, which is usually mixed into a liquid solution and injected into a vein, appears to dull the edges of reality. Addicts have reported that heroin "makes my troubles roll off my mind," and "makes me feel more sure of myself."

The drug depresses certain areas of the brain, and may reduce hunger, thirst, and the sex drive. Because addicts do not usually feel hungry, their hospital care may include treatment for malnutrition. The drug may also reduce feelings of pain.

Withdrawal symptoms appear in the addicted person about 18 hours after the drug has been discontinued.

In general, many factors influence the effects of the drug. These include the user's personality, the size and frequency of dose, and how the drug is taken.

Who takes narcotics?

Studies by the U.S. Public Health Service show that heroin addiction today is found chiefly among young men of minority groups in ghetto areas. Of the more than 60,000 known addicts listed by the Bureau of Narcotics and Dangerous Drugs, more than half live in New York State—and most of these in New York City. Recent figures show that more than half of the addicts are under 30 years of age.

Narcotic addiction in the United States is not limited to the heroin users. Some middle-aged and older people who take narcotic drugs regularly to relieve pain can also become addicted. So do some people who can get drugs easily, such as doctors, nurses, and druggists. Studies show that this type of addict has personality and emotional difficulties not much different from other regular narcotic users.

What is the life of an addict like?

Many addicts admit that, once on drugs, getting a continued supply becomes the main object of their lives. Concentration on getting drugs frequently prevents the addict from continuing either his education or his job. His health is often bad. He may be sick one day from the effects of withdrawal and sick the next from an overdose. Statistics indicate the life span of the drug dependent individual may be drastically shortened. He is usually in trouble with his family and almost always in trouble with the law.

Does addiction lead to crime?

Some studies suggest that many of the known narcotic addicts have had some trouble with the law before they became addicted. Once addicted, they may become even more involved with crime because it costs so much to support the heroin habit. For example, an addict may have to spend as much as $75 or $100 to buy his day's supply of heroin.

Most authorities agree that the addict's involvement with crime is not a direct effect of the drug itself, but turning to crime is usually the only way he has of getting that much money. His crimes are nearly always thefts or other crimes against property, and not often crimes of passion or violence.

What are the legal penalties?

The Harrison Act of 1914, which provides that illegal possession of narcotics is punishable by fines and/or imprisonment, established federal penalties for illegal narcotics usage. Sentences can range from 2 to 10 years for the first offense, 5 to 20 years for the second, and 10 to 20 years for further offenses.

Illegal sale of narcotics can mean a fine of $20,000 and a sentence of 5 to 20 years for the first offense, and 10 to 40 years for further offenses. A person who sells narcotics to someone under 18 is refused parole and probation, even for the first offense. If the drug is heroin, he can be sentenced to life imprisonment or to death.

The Harrison Act has served as a model for most state laws, and both federal and state judges have generally imposed severe sentences for narcotics violations.

What is the medical view of addiction?

Medical authorities say that the addict is a sick person. He needs treatment for his physical addiction and withdrawal sickness. Then, he needs help to keep from going back to drug use after his withdrawal.

The most difficult part of an addict's treatment comes after he is out of the hospital. The doctors can help get him off the drug and help to restore his health, but it is harder to keep him from picking up the habit again, for many reasons. Drug taking may have become his way of life, including the friends he has and the kind of job he can get. He may not have a healthy enough personality to want to make a fresh start in life or to enjoy normal pleasures.

A number of rehabilitation approaches to the problems are being tested. Rehabilitation means physical, mental, emotional, social, and vocational rebuilding. With many addicts, it can take all of these efforts combined to keep their lives from being wasted.

One experimental technique to help addicts involves maintenance treatment in community clinics, where the addict can go regularly to take a drug that effectively blocks the "high" he would feel from his heroin. Addicts who have stayed off the drug for a number of years report that close supervision and continued treatment once they returned home from the hospital were the main factors in their rehabilitation.

In a New York City halfway house, a self-help program run by former addicts is being tried as a way to help people break the drug habit. One of the features of Daytop Village is the "no nonsense" treatment the new patients get from the senior members of the house. They hold frank and open group discussions several times a week, and gain status and privileges only by hard work, honesty, and staying off drugs. The treatment program lasts a year.

Because the rebuilding of a life can require many services and special programs, this chance for addicts was very limited in the past. Now a new law—the Narcotic Addict Rehabilitation Act of 1966—gives certain addicts a choice of treatment instead of imprisonment, and if they are not charged with a crime, the right to receive treatment instead of neglect. The law also provides for the first time that a complete range of rehabilitation services will be made available to addicts in their own home communities.

What is the Narcotic Addict Rehabilitation Act of 1966?

The Act provides that:

1. An addict charged with a nonviolent federal offense who elects to be committed for treatment instead of prosecuted for his crime can be committed to the Secretary of Health, Education, and Welfare for examination, treatment, and rehabilitation.

2. An addict already convicted of a crime can be committed to the Attorney General for a treatment period of no more than 10 years, or for the maximum period of sentence that could be imposed for his conviction.

3. An addict not charged with an offense can be civilly committed to the Secretary of HEW for treatment upon his own application, or that of a relative or another "related individual."

Care of the addict after his release from the hospital is a key aspect of his treatment.

The National Institute of Mental Health of the U.S. Department of Health, Education, and Welfare and the Department of Justice administer the Act.

Under more recent legislation, states and communities can receive federal support through the NIMH for specialized training programs, and for the construction, staffing, and operation of new addiction treatment facilities on a joint federal-state basis.

What is being done to learn more about addiction?

The National Institute of Mental Health operates Clinical Research Centers at Lexington, Kentucky, and Fort Worth, Texas. Scientists at the centers do research on patterns of drug usage, on effects of drug use, and on antidotes for narcotic addiction. These centers were formerly Public Health Service hospitals for addicts and will treat addicts under the new Act until community hospital facilities are available.

At the Lexington center, Institute scientists are working with comparatively new drugs, cyclazocine and naloxone. Early clinical trials suggest that regular doses of these drugs can help prevent heroin relapse by decreasing the addict's desire for heroin.

In addition, the NIMH Center for Studies of Narcotic and Drug Abuse supports research, training, and services dealing with problems of addiction. •

"Central Nervous System
AMPHETAMINES Non-Narcotic Stimulants"

Class:	Stimulant—Energizer
Property:	Non-addicting—Emotional Dependence No withdrawal
Reaction:	Stimulation—Excitement—Sleeplessness Loss of appetite
After Effect:	Nervousness—Tremors—Paranoid ideas Hallucination
Administered:	Orally—By Injection
Slang Names:	Bennies—Pep Pills—Co Pilots—Bombitos
Forms:	Capsule—Tablet—Liquid

Central Nervous System
LAWS—Re: Amphetamine Stimulants

SALE OR POSSESSION 21-29-3 (a)
General Laws of Rhode Island

MISBRANDED DRUGS AND DEVICES (Not in original container) 21-29-3 (d)

NO PRESCRIPTION 21-29-3 (d)

OBTAINING DRUG BY UNLAWFUL MEANS (Fraud & Deceit) 21-29-3 (i) 21-29-3

AMPHETAMINES

Amphetamines are not narcotics but are all prescription drugs. Medical use is as a stimulant or in dieting for obesity.

The effect is the opposite of that of the Barbiturates in that they make the user hyper-active and restless. If taken in large doses these drugs produce hallucinations. They may cause a motor vehicle operator to "black-out" while traveling at high speeds. It is suggested that Amphetamines be suspected in accident investigations where there is no apparent cause and no odor of liquor present.

While most Amphetamines are ingested orally, it is not uncommon to find them mixed in a "cooker" and injected. the currently most popular form of this drug is "DESOXYN" which will be found in liquid form in a 1 ml ampule. This latter drug may be used alone or mixed with Heroin.

There are approximately one thousand different sizes, shapes and colors of tablets and capsules in the Amphetamine class of drugs. Preliminary identification of suspected items can be made by a pharmacist with Laboratory confirmation following.

BARBITURATES — Non-Narcotic

Class:	Sedative—Hypnotic
Property:	Addicting—Severe Withdrawal
Reaction:	Sleep—Relief from tension and anxiety
After Effect:	Euphoria—Hypnosis—Stupor—Intoxication
Administered:	Orally—By Injection
Slang Names:	Goof Balls—Red Devils—Yellow Jackets Nembies—Tooies—Rainbows
Forms:	Capsule—Tablet—Liquid

LAWS—Re: BARBITURATES

SALE OR POSSESSION 21-29-3 (d)

OBTAINING BY FRAUD AND DECEIT (covers forged prescription) (l)

MISBRANDED DRUGS AND DEVICES (Not in orignal container (d-3)

UNLAWFUL SALE BY PHARMACIST (a-1)

SALE OR POSSESSION (Federal Law)

Federal Food, Drug and Cosmetic Act

Barbiturates, commonly referred to as "goof balls" or "sleepin pills" are all prescription drugs. They are not narcotics but are addicting and produce a most serious form of withdrawal, frequently resulting in death.

These drugs are proably responsible for more intentional or accidental suicides than any other substance or means. The great danger in the misuse of Bariturates is that intestinal absorption is very slow and the intense effect of overdosages is delayed and often fatal.

In the practice of medicine, Barbiturates are prescribed when sedation and sleep is required. Abusers of the drugs do not use them to produce sleep but for the intoxicant effect resulting from lare doses. They may be used as a supplement to or coincidentally with Heroin. "Goof Balls" are taken orally or injected hypodermically.

There are hundreds of forms of Barbiturates manufactured by pharmaceutical companies. Initial identification of any suspected items can be made by a local druggist with Police Laboratory confirmation following.

Barbiturates should be suspected where there is apparent intoxication without the odor of liquor on the breath. In cases of overdose, a physician should be summoned immediately even though no signs of life are apparent.

Heavy users of Barbiturates should be handled with extreme caution since maniacal seizures are common and appear without warning.

NON-BARBITURATE SLEEPING PILLS

These products have similar reactions to Barbiturates but are not prepared from barbituric acid. The laws affecting the Barbiturates do not apply. The following are common forms of these drugs and all require prescriptions:

DORIDEN —large, white tablet, scored on one side with the letters CIBA on the other.

NOLUDAR—aspirin sized, flat white tablet, scored on one side; also as pink and white capsule.

CHLORAL HYDRATE—green capsule filled with liquid, known as "Green Dragons" or "Knock-out drops".

COCAINE — Narcotic

Class:	Stimulant—Local Anesthetic
Property:	Non-Addicting—Emotional Dependence No withdrawal
Reaction:	Exhilaration—Ecstasy—Excitement
After Effect:	Anti-Social Behavior—Hallucination—Paranoia
Administered:	Sniffing—Injection
Slang Names:	C--coke—Charlie—snow—Cocoanut
Forms:	Deck—Capsule

LAWS—Re: COCAINE

SALE OR POSSESSION 21-28-31 21-28-32

LAWS PERTAINING TO THE SYNTHETICS

(Novocaine—Procaine—Tetracaine—Benzacaine)

MISBRANDED DRUGS AND DEVICES (Not in original container) 21-28-28

NO PRESCRIPTION 21-28-10

OBTAINING DRUG BY FRAUD AND DECEIT 21-28-55

Cocaine is a narcotic drug which is used in medicine chiefly as a local anesthetic. Because of its toxicity it is rarely used hypodermically by doctors.

Drug abusers "snort" Cocaine, i.e., introduce the drug into the nostrils by means of a small piece of folded paper matchbook cover called a "quill". Cocaine may be mixed with Heroin and injected as a "speedball"; this diminishes the powerfful stimulant effect of the Cocaine and reducés the severe depression which follow the use of Heroin.

"Coke" is considered a "rich man's habit" since the drug costs about twice the amount of Heroin. Users will usually be found among professional entertainers, musicians and gamblers.

Illicit Cocaine is sold in clear gelatine capsules or in silver foil "decks" to distinguish it from Heron.

Cocaine is a white, crystalline powder resembling Epsom Salt or snow.

SYNTHETICS OF COCAINE

The synthetics are NON-NARCOTICS which have reactions similar to the natural drug. They may be found as white, crystalline powders or as colorless or colored liquids.

There is no field test available for Cocaine or for the synthetics. Chemical analysis is the only accurate means of identification.

HANDLING COCAINE USERS

Extreme caution should be exercised since this drug and its synthetics are powerful central nervous system stimulants. Users frequently develop a sense of great physical power which makes for anti-social behavior often manifesting itself in acts off violence.

COUGH MEDICINES

The cough medicines which present a police problem are those preparations classed as "exempt narcotics".These latter are defined as "—preparations which may be sold at retail by pharmacists and dipensed by hospitals, nursing homes and dispensaries without a physician's prescription or written order, in quantities of not more than four fluid ounces to one person at any one time".

The most popular of the misused cough medicines are:

ROBITUSSIN AC
COSANYL
ENDOTUSSIN
TUSSAR
HYCODAN
TERPIN HYDRATE

All of the above contain approximately one grain of Codeine per fluid ounce. Codeine is an Opium derivative which is a mild sedative and analgesic. It s the sedative quality of these medicines which appeals to the drug abusers. In effect, gulping down a four ounce bottle is comparable to using a weak "bag" of Heroin. To increase the effect, a common practice is to use the cough medicines to wash down a Barbiturate or other form of sleeping pill

GLUE SNIFFING

MATERIALS USED

Airplane glue; Magic Markers; hair spray; cleaning fluids; gasoline; paint.

HOW USED

Airplane glue squeezed into paper bag, head inserted into bag and fumes inhaled.

Other items usually sniffed right out of container. May also take caps from gasoline tanks and inhale fumes.

EFFECTS

State of intoxication resembling alcoholic inebriation. If used habitually may provide exhilaration and sense of well-being. Not physically addicting but may cause emotional dependence.

CONSEQUENCES

Damage to lungs, liver, kidneys, bone marrow and brain. While no definite knowledge available, suspect this practice may lead to further experimentation terminating in drug use.

IDENTIFICATION OF USERS

Unpleasant odor on breath, secretions from nose and mouth, nausea, dozing, loss of appetite and weight.

POLICE ACTION

Not a crime. If child or minor, refer to Family Court as "Person in need of supervision".

HALLUCINOGENIC DRUGS

21-29-3

Possess, sell or give away such drugs by unauthorized person. Includes mescaline, stramonium, peyote and their salts or derivatives.

HEROIN — Narcotic

Class:	Sedative—Depressant
Property:	Addicting—Withdrawal
Reaction:	Analgesia—Euphoria—Tranquilizing Effect
After Effect:	Sleep—Lethargy—Loss of drive and libido
Administered:	Injection—Sniffing
Slang Names:	H—horse—stuff—shit—junk—tecata doo gee—Hock For
Forms:	Decks (Bags)—Capsules—Glassine or Polyethylene bags

LAWS—Re: HEROIN

SALE OR POSSESSION 21-28-31 28-30-1

NEEDLE, SYRINGE, INSTRUMENTS, IMPLEMENTS,—SALE OR POSSESSION 21-28-33

Misdemeanor

HEROIN

Heroin is at all times a contraband drug in the United States; it cannot be manufactured, dispensed or even possessed. It is the drug of choice of the majority of American addicts.

Chart Listing Drugs, Their Medical Uses, the Symptoms

Name	Slang Name	Chemical or Trade Name	Pharmacologic Classification	Medical Use	How Taken
Heroin	H, Horse, Scat, Junk, Snow, Stuff Harry, Joy Powder	Diacetylmorphine	Depressant	Pain Relief	Injected or Sniffed
Morphine	White Stuff, Miss Emma, M, Dreamer	Morphine sulphate	Depressant	Pain Relief	Swallowed or Injected
Codeine	Schoolboy	Methylmorphine	Depressant	Ease Pain and Coughing	Swallowed
Methadone	Dolly	Dolophine Amidone	Depressant	Pain Relief	Swallowed or Injected
Cocaine	Speed Balls, Gold Dust, Coke, Flake, Bernice, Corine, Star Dust	Methylester of benzoylecgonine	Stimulant	Local Anesthesia	Sniffed, Injected, or Swallowed
Marijuana	Pot, Grass, Tea, Locoweed, Mary Jane, Hashish, Gage, Reefers	Cannabis Sativa	Stimulant Depressant, or Hallucinogen	None in U.S.	Smoked, Sniffed, or Swallowed
Barbiturates	Barbs, Blue Devils, Candy, Yellow Jackets. Phennies, Peanuts, Blue Heavens	Phenobarbital Nembutal, Seconal, Amytal	Depressant	Sedation, Relieve high blood pressure epilepsy, hyperthyroidism	Swallowed or Injected
Amphetamines	Bennies, Dexies, Co-Pilots, Wake-up, Lid Proppers, Pep Pills, Hearts	Benzedrine, Preludin,Dexedrine, Dexoxyn, Methodrine	Stimulant	Relieve mild depression, control appetite and narcolepsy	Swallowed or Injected
LSD	Acid, Sugar, Bid D, Cubes, Trips	d-lysergic acid diethylamide	Hallucinogen	Experimental Study of Mental Function alcoholism	Swallowed
DMT	Businessman's High	Dimethyltriptamine	Hallucinogen	None	Injected
Mescaline	Cactus, Peyote	3, 4, 5-trimethoxy-phenethyamine	Hallucinogen	None	Swallowed
Psilocybin	Mushrooms	3 (2-dimethylamine ethylindol-4-ol dihydrogen phosphate	Hallucinogen	None	Swallowed

They Produce and Their Dependence Potential

Usual Dose	Duration of Effect	Initial Symptoms	Long-Term Symptoms	Physical Dependence Potential	Mental Dependence Potential
Varies	4 hrs.	Euphoria Drowsiness	Addiction, Constipation Loss of Appitite	Yes	Yes
15 Milligrams	6 hrs.	Euphoria Drowsiness	Addiction, impairment of breathing	Yes	Yes
30 Milligrams	4 hrs.	Drowsiness	Addiction	Yes	Yes
10 Milligrams	4-6 hrs.	Less Acute than opiates	Addiction	Yes	Yes
Varies	Varies	Excitation Talkativeness Tremors	Depression, Convulsions	No	Yes
1 or 2 cigarettes	4 hrs.	Relaxation, Euphoria, alteration of perception and judgment	Usually none	No	?
50-100 Milligrams	4 hrs.	Drowsiness, Muscle relaxation	Addiction with severe withdrawal symptoms, possible convulsions	Yes	Yes
2.5-5 Milligrams	4 hrs.	Alertness, Activeness	Delusions Hallucinations	No	Yes
100 Micrograms	10 hrs.	Exhilaration, Excitation Rambling Speech	May intensify existing psychosis, panic reactions	No	Yes
1 Milligram	4-6 hrs.	Exhilaration Excitation	?	No	?
350 Micrograms	12 hrs.	Exhilaration, Anxiety Gastric distress	?	No	?
25 Milligrams	6-8 hrs.	Nausea, Vomiting, Headaches	?	No	?

Pure Heroin is a white or slightly brownish-white crystalline powder, fine in texture and slightly bitter to the taste.

Most of the drugs encountered will be impure, heavily adulterated with Lactose (Milk Sugar) or Mannite (a laxative); a small amount of Quinine may be added to restore the bitterness.

Officers should never taste specimens. Many substances, some poisonous have been found in "decks". A field test, the Marquis Reagent, is available at the Narcotics Bureau but this is not a positive test. All samples must be submitted to the Police Laboratory; include spoons, cookers, cottons, droppers; needles, strainers, stapling machines, etc.

To support a Felony charge the evidence must show at least 55 grains of Heroin. As a general rule this means more than 50 $3 bags or more than 25 $5 bags.

MARIHUANA — Narcotic

Class:	Unclassified
Property:	Non-addicting—Habit Forming—No Withdrawal
Reaction:	Release of inhibition—Loss of Coordination
After Effect:	Susceptibility to suggestion—Voracious appetite—Anti-Social Behavoir—Hallucination
Administered:	Smoked—Infused in liquids—Sprinkled on food
Slang Names:	Pot—Tea—Weed—Hay—Grass
Forms:	Cigarette form—Packed in small manila envelopes

LAWS—Re: Marihuana

SALE OR POSSESSION 21-28-31 21-30-1

UNLICENSED GROWING OF MARIHUANA PLANT 21-28-4

MARIHUANA

Marihuana has no theraputic value. The plant from which it is obtained is a weed known as "Cannabis Sativa" or "Indian Hemp". The plant grows from 3 to 16 feet in height with stalks varying in thickness from ½ to 2 inches. The leaves are sticky to the touch and are compound, composed of 5, 7, 9 or more lobes or leaflets (aways an odd number); the outer two lobes are always smaller than the inner; each leaf is pointed at both ends, is veined and has serrated edges; the tops of the plants hold clusters of small flowers. The resinous extraction derived from the plant is Cannabinal, a narcotic principle.

When burning, Marihuana smells like burning rope or leaves. The sickeningly sweet aroma is distinctive and penetrating.

HOW SOLD

Cigarette Form—the dried, pulverized leaves are rolled in cigarette paper with ends twisted or tucked in to prevent contents from falling out. These "joints" or "sticks" are much thinner than commercial cigarettes. A "bomber' is a double thickness form which sells for about twice the price.

Loose Marihuana—usually packed in small, brown or manila colored payroll envelopes in amounts up to 1 ounce. It is purchased in this form for rolling into cigarettes or to be smoked in tiny pipes. Smoking is called "blowing" or "blasting".

EFFECTS

The most dangerous feature of Marihuana is that it has varying effects on different people. The range is between a mild form of intoxication to violence.

Records indicate that the majority of Marihuana users will eventually become Heroin users.

Arresting officers should exercise extreme caution when dealing with Marihuana smokers. Their reactions are unpredictable and can be dangerous.

Youth Gangs are frequent users of Marihuana.

OPIUM — Narcotic

Class:	Sedative—Depressant
Property:	Addicting—Withdrawal
Reaction:	Analgesia—Euphoria—Tranquilizing Effect
After Effect:	Sleep—Grandiose Dreams—Stupor—Lethargy
Administered:	Chewed—Smoked—Taken Orally
Slang Names:	Pen Yin—Bock For—Bong Hop
Forms:	Solid—Paste—Powder

LAWS—Re: OPIUM

SALE OR POSSESSION 21-28-31 28-28-32

NOT IN ORIGINAL CONTAINER (legally prepared forms of the drug) 21-28-28

APPARATUS FOR USE OF OPIUM (pipe, lamp, Yen Gow, Yen Hock, etc.)

FRAUD AND DECEIT IN OBTAINING NARCOTIC DRUGS 21-28-55

OPIUM

Opium is the source of a number of drugs, all classed as opiates; among them are Heroin, Morphine, Codeine, Paregoric and others. Once the most widely abused drug, Opium will now be seldom encountered in the United States. It is smoked by a small number of Orientals and fewer Occidentals.

The illicit supply of Opium is sporadic and is generally offered to regular customers as soon as it enters the country.

When offered for sale it may be in the form of a deep brown, brittle solid but more often as a "nip" or Smear". The latter are smears of smoking Opium on pieces of rice paper which are folded into a packet. It may also be found as a "Jung", a small plastic vial holding about ½ ounce of Opium.

Smoking of Opium requires a pipe, heating lamp, a long pointed needle for rolling the Opium (Yen Hock) and a hooked, knife-like scraper (Yen Gow). The scrapings from the top and the interior of the bowl are collected and mixed with tea or wine as "Yen Shee Suey" and storedd in small bottles or jars. Used as a "holdover" between pipes, this liquid contains a quantity of Opium and the same laws apply.

TRANQUILIZERS — Non-Narcotic

Class:	Tranquilizing agent
Property:	Non-addicting; emotional dependence; withdrawal
Reaction:	Muscle relaxant—Sedative
After Effect:	Reduction of tension, irritability, anxiety
Administered:	Orally
Slang Names:	None encountered
Forms:	Tablets—Capsules

LAWS—Re: TRANQUILIZERS

NO PRESCRIPTION 21-29-3 (d)

MISBRANDED DRUGS & DEVICES (Not in original container) 21-29-3 (d)

OBTAINING DRUG BY UNLAWFUL MEANS (Fraud and Deceit) 21-29-3 (l)

TRANQUILIZERS

These drugs are known as ataraxies or tranqilizing agents. Their function is to reduce anqiety and restlessness and they are a valuable tool of the phychiatrist.

Addicts take large doses to achieve an emotional comfort when their drug of choice is in short supply. Tranquilizers are not considered addicting drugs but they do create an emotional dependence when used in large doses or over long periods.

All Tranquilizers are prescription drugs under both State and Federal control.

The withdrawal symptoms resulting from abrupt cessation after prolonged overdosage are similar to those seen with the Barbiturates, including convulsions.

Reprinted through the courtesy:

Barrington Police Department
Stanley Gontarz
Chief of Police

APPENDIX G

DRUG ABUSE SLANG TERMS

Drug abusers have developed their own special language, a language that covers most aspects of life associated with the drug world subculture. The vocabulary frequently changes from area to area and from time to time. Since the teenager will often pick up the slang language associated with the drug abuser and include it in his vocabulary, the mere use of words does not indicate drug use.

Acid - LSD
Acid head - one who abuses LSD
Artillery - equipment for injecting drugs

Backtrack - to withdraw the plunger of a syringe before injecting drugs to make sure the needle is in proper position
Bag - a small container of drugs
Bagman - a drug supplier, dealer or pusher
Ball - a party
Balloon - a small packet of narcotics
Bang - to inject drugs, or the injection itself
Barbs - barbiturates
Bean - capsule
Been had - arrested
Bennies - 'Benzedrine' (brand of amphetamine sulfate, Smith Kline & French Laboratories) tablets
Benny - intoxication after using benzedrine
Bent out of shape - under the influence of LSD
Bernice - cocaine
Big John - the police
Bindle - a small quantity or packet of narcotics in a folded paper or envelope
Bird's eye - extremely small amount of narcotics
Biz - equipment for injecting drugs
Black and Whites - patrol car
Blanks - poor quality narcotics
Blast - party
Blast a joint or a stick - smoke a marijuana cigarette
Blasted - under the influence of drugs
Blasting party - marijuana smoking party
Blow (a stick, hay, jive, tea, pot) - to smoke a marijuana cigarette
Blue Heavens - Sodium amytal tablets
Blue Devils - 'Amytal' (brand of amobarbital, Eli Lilly and Company)
Blue Velvet - Paregoric and an antihistamine
Bombito or Bombido - injectable amphetamine, or a vial of amphetamine - DMT
Boot - effect of a drug
Boxed - in jail
Boy - Heroin
Bread - money
Brick - a kilo of marijuana in compressed brick form
Bull - a Federal narcotic agent, a police officer
Bum trip - an unpleasant experience with LSD
Bummer - an unpleasant LSD experience
Burn - to take money for heroin with no plans to deliver, stuff or phony drugs
Burned - to receive phony or badly diluted drugs
Business - paraphenalia for injecting narcotics
Busted - arrested
Buzz - try to buy drugs or to feel the effects of drugs

Can - one ounce of marijuana. The term was derived from the Prince Albert Tobacco can in which marijuana was commonly sold in the past.

C - Cocaine
Caballo - heroin
Candy - barbiturates
Cap - a container of drugs (usually a capsule)
Cartwheels - amphetamine sulfate (round, white, double-scored tablets)
Champ - a drug abuser who won't inform, even under pressure
Channel - blood vessel
Charge - marijuana
Charged up - under the influence of drugs
Chipping - taking small amounts of drugs on an irregular basis
Chippy - an abuser taking small, irregular amounts - also, prostitute (potential addict)
Clean - refers to removing stems and seeds from marijuana, also an addict who is free from injection marks, or a pusher who has no narcotics on person, as in expression "I'm clean, man."
Clear up - to withdraw from drugs
Coasting - under the influence of drugs
Coke - Cocaine
Coked up - under the influence of cocaine
Cokie - a cocaine addict
Cold Turkey - breaking the drug habit without medication or medical care
Connect - to purchase drugs
Connection - a drug supplier
Cooker - any spoon or bottle cap used in the preparation of heroin
Cook up a pill - to prepare opium for smoking
Coming down - emerging from an LSD experience
Co-pilots - Amphetamine tablets
Cop - to purchase drugs
Cop out - to alibi, confess
Corine - cocaine
Cotics - narcotics
Cottonhead - user who recooks the cotton fibers found in cookers when their supply is used up and they are in need of an injection
Cotton - bits of cotton saturated with narcotic solution used to strain foreign matter when brewing solution up into hypodermic syringes or eye-droppers
Cotton top - same as cottonhead
Croaker - a physician who dispenses or prescribes narcotics to an addict
Crutch - device used to hold marijuana cigarette when it has burned to the point where it will burn the fingers
Crystals - Methamphetamine
Cube - non-user of drugs; sugar cube impregnated with LSD
Cut - to adulterate a narcotic by adding milksugar

Dabble - to take small amounts of drugs on an irregular basis
D.D. - a fatal dose of narcotics or other drugs
Dealer - a drug supplier
Deck - a small packet of narcotics
Dexies - 'Dexedrine' (brand of dextroamphetamine sulfate, Smith Kline & French Laboratories) tablets
Dime bag - a ten dollar purchase of narcotics
Dirty - in possession of narcotics
Dollies - 'Dolophine' (brand of methadone hydrochloride, Eli Lilly and Company) tablets
Domino - to purchase drugs
Doojee - heroin
Dope - any narcotic
Dope head - user of narcotics and other regulated drugs
Double Trouble - 'Tuinal' (brand of amobarbital sodium and secobarbital sodium, Eli Lilly and Company) capsules
Do up - to smoke a marijuana cigarette
Dropper - paraphenalia for injecting narcotics
Dropped - arrested
Dust - cocaine
Dynamite - narcotics of high potency

Ego games - a deprecative term applied by LSD users to social conformity and to the normal activities, occupations and responsibilities of the majority of people
Eighth - eighth of an ounce
Ends - money
Experience - an LSD "trip"

Factory - equipment for injecting drugs
Fit - paraphenalia for injecting narcotics

Fix - an injection of narcotics
Flake - cocaine
Flea powder - poor quality narcotics
Floating - under the influence of drugs
Fly - take narcotics
Flying high - under the influence of marijuana
Foil - small packet of narcotics
Footballs - oval-shaped amphetamine sulfate tablets
Freak out - to have an unpleasant reaction while on an LSD "trip"
Fresh and Sweet - out of jail
Fuzz - the police

Gage - marijuana
Gassing - sniffing gasoline fumes
Gee-head - paregoric user
Geetis - money
Geezer - narcotic injection
Get high - to smoke marijuana
Gimmicks - the equipment for injecting drugs
Glad rag - cloth material or handkerchief saturated with the chemical
Glad stuff - favorite drug of addiction
Gluey - glue sniffer
Gold dust - cocaine
Goods - narcotics
Goofballs - barbiturates or an alcohol and barbiturate combination
Goofed up - under the influence of barbiturates
Gow-head - an opium addict
Gram - a gram of heroin (approximately ten capsules)
Grass - marijuana in raw state
Grasshopper - marijuana user
Greenies - green, heart-shaped tablets of dextroamphetamine sulfate and amobarbital
Griefo - marijuana
Guide - a person who does not use LSD while sitting with a user during a "trip"
Gum - heroin
Gun - a hypodermic needle

H - heroin
Habit - addiction to drugs, physical dependency upon drugs
Hand-to-hand - person-to-person delivery
Hang-up - a personal problem
Happening - a pseudo experience obtained through the use of lights and sound; to have the same type of experience that one has with a drug
Happy dust - cocaine
Hard stuff - morphine, cocaine or heroin
Harness bulls - uniformed officers
Harpoon - hypodermic needle
Harry - heroin
Hash - Hashish - resin from the tops of the female cannabis plants
Hay - marijuana
Hayhead - marijuana user
Hearts - 'Benzedrine' or 'Dexedrine' (brands of amphetamine sulfate and dextroamphetamine sulfate, Smith Kline & French Laboratories) heart-shaped tablets
Heat - the police
Heeled - having narcotics; have money
Hemp - marijuana
Hero - heroin
High - under the influence of drugs
Hit - to purchase drugs; an arrest; an injection of narcotics
Hocus - a narcotic solution ready for injection
Holding - possessing narcotics
Hooked - addicted
Hophead - narcotic addict
Hopped up - under the influence of drugs
Horn - to sniff powdered narcotics into nostrils
Horse - heroin
Hot - wanted by the police
Hot shot - a fatal dosage of poison which the user believes to be good drugs
Hype - narcotic addict

Ice cream habit - a small, irregular drug habit

Jag - intoxication after using Benzedrine
Jab - to inject drugs
Jive - marijuana
Joint - marijuana cigarette; paraphenalia to inject a narcotic drug
Jolt - an injection of narcotics; effects of the drug
Jones - the habit; an addict
Joy-pop --to inject small amounts of drugs irregularly
Joy-popper - an occasional user of drugs

Joy-powder - heroin
Junk - narcotics
Junkie - narcotic addict
Juvies - juvenile offenders

Kick, or kick the habit - abandon the drug habit
Kick parties - parties or sessions where LSD is used
Kicks - the sensation derived from using drugs
Kilo - a large amount of narcotics
Kit - paraphenalia for injecting narcotics
Knocked out - under the influence of narcotics

Lace - money
Layout - the equipment for injecting drugs
Lid proppers - amphetamines
Lipton tea - poor quality narcotics
Lit up - under the influence of drugs
Loaded - under the influence of drugs
Locoweed - marijuana
Long green - money
Luer - hypodermic needle

M - morphine
Machinery - equipment for injecting drugs
Mainline - to inject drugs directly into a vein, or the injection itself
Mainliner - one who injects narcotics into a vein
Make a buy - to purchase drugs
Make a meet - to purchase drugs
Man - the police, a drug connection, or a term of address within a street group
Manicure - high grade marijuana (i.e., no seeds or stems), or to clean and prepare marijuana for rolling into cigarettes
Mary Jane - marijuana
Match box - marijuana container
Medicine - drugs of addiction
Member - Negro or some other than a white person
Meth - Methedrine, Methamphetamine, usually injected for rapid results
Mezz - marijuana
Mickey Finn - chloral hydrate
Miss Emma - morphine
Mojo - narcotics
Monkey - a drug habit where physical dependence is present
Mor a grifa - marijuana
Mugglehead - marijuana user
Muggles - marijuana
Mutah - marijuana

Narco - police officer (the law)
Narcotic bull - narcotic agent
Needle - hypodermic syringe
Nickel bag - a five dollar purchase of narcotics
Nimby - 'Nembutal' (brand of pentobarbital, Abbott Laboratories) capsules

O.D. - overdose of narcotics or other drugs, usually fatal
Off - withdrawn from drugs
Oil burner - a narcotics habit requiring large amounts of drugs
On a rip - under the influence of LSD
On a trip - under the influence of LSD or other hallucinogens
On the beam - under the influence of marijuana
On the needle - on hard narcotics, "mainlining"
On the nod - under the influence of drugs
On the street - out of jail
On the stuff - regular user or addict
Oranges - 'Dexedrine' (brand of dextroamphetamine sulfate, Smith Kline & French Laboratories) tablets
Outfit - equipment for drug injection, eye dropper, cooker (spoon or bottle cap) used to prepare fix
Out of the body - the feeling a person experiences while under the influence of LSD
Out of this world - under the influence of marijuana
Outside of myself - the feelings a person experiences while under the influence of LSD

Pack - heroin
Pad - a drug user's domicile or center of activity
Panic - a scarcity of drugs usually caused by the arrest of a big peddler
Paper - a prescription or packet of narcotics
Paper hanger - one who forges prescriptions or checks

Peaches - 'Benzedrine' (brand of amphetamine sulfate, Smith Kline & French Laboratories) tablets
Peanuts - barbiturates
Peddler - dealer in drugs
P.G. or P.O. - paregoric
Piece - a container of drugs, an ounce of heroin, morphine, etc.
Pill freak - user of dangerous drugs of the amphetamine or barbiturate type
Pills - barbiturates or amphetamines
Pill head - same as pill freak
Pilly - dangerous drug user
Pinks - 'Seconal' (brand of secobarbital, Eli Lilly and Company) capsules
Plant - a cache of narcotics
Point - paraphenalia for injecting narcotics
Pop - to inject drugs
Pot - marijuana
Pothead - marijuana user
Psychedelic - that which enhances or expands the mind
Pure - pure narcotics of very good grade
Pusher - narcotic seller

Quill - a folded matchbox cover from which narcotics are sniffed through the nose

Rainbows - 'Tuinal' (brand of amobarbital sodium and secobarbital sodium, Eli Lilly and Company) capsules
Reader - a prescription
Red devils, or redbirds - Seconal (brand of secobarbital, Eli Lilly and Company) capsules
Reefer - a marijuana cigarette
Roach - the butt of a marijuana cigarette
Rope - marijuana
Roses - 'Benzedrine' (brand of amphetamine sulfate, Smith Kline & French Laboratories) tablets
Rumble - police in the neighborhood, a shakedown or search

Sam - Federal narcotics agents
Satch Cotton - cotton used to strain narcotics before injection, or cotton saturated with heroin
Scat, or Scag - heroin
Schmeck - heroin
Script - doctor's prescription
Score - to purchase drugs
Seggy - 'Seconal' (brand of secobarbital, Eli Lilly and Company) capsules
Shooting gallery - place where narcotic addicts congregate to inject drugs
Shoot up - to inject drugs
Shot - injection
Silk - a white person
Sitter - an experienced LSD user who helps or guides a new user
Sixteenth - sixteenth of an ounce
Skin pop - injection of drugs beneath skin
Skin popper - occasional user of drugs
Slammed - in jail
Sleigh ride - cocaine
Smack - heroin; to sniff narcotics into the nostrils
Sniff - to sniff narcotics, usually heroin or cocaine through the nostrils
Snort - to sniff powdered narcotics through the nostrils
Snow - cocaine
Snowbird - cocaine user
Source - where narcotics are obtained, pusher dealer, supplier, connection
Speedball - an injection which combines a stimulant and depressant - often cocaine mixed with morphine or heroin
Speed - Methedrine, methamphetamine usually injected for rapid results
Speed freak - a methedrine abuser
Spike - the needle used for injecting drugs
Spoon - sixteenth of an ounce of heroin
Square - non addict
Stack - a quality of marijuana cigarettes
Star dust - cocaine
Stash - a cache of narcotics
Stick - a marijuana cigarette
Stoned - under the influence of narcotics
Stool - informer
STP - a highly potent hallucinogen
Straight - in possession of narcotics, also one who is not involved in the drug culture
Strong out - regular user or addict
Stuff - narcotics
Sugar - powdered narcotics
Supplier - drug source
Swingman - a drug supplier

Take a band - take drugs
Take off - take drugs
Take up - light a marijuana cigarette
Taste - small quantity of narcotics usually given as a sample or reward
Tea - marijuana
Teahead - marijuana user
Tea party - marijuana smoking party
Tecata - heroin
Texas tea - marijuana
The man - dealer in drugs
Things - various amounts of a narcotic
Thoroughbred - a high type hustler who sells pure narcotics
To be hep - to understand
To be hip - to understand
To have savvy - to understand
To hit on - to try to buy drugs
To make it - to try to buy drugs
Tooies - 'tuinal' (brand of amobarbital sodium and secobarbital sodium, Eli Lilly and Company) capsules
Toke - a drag from a marijuana pipe or cigarette
Tools or works - equipment used for injection by hypodermic
Torch up - light a marijuana cigarette
Toss - search
Toxy - the smallest container of opium
Tracks - a series of puncture marks usually on the arms or legs caused by repeated injections
Travel agent - an experienced LSD user who helps or guides a new user
Trip - being high on hallucinogens, particularly LSD
Truck drivers - amphetamines
Tuning in - feeling the effects of LSD
Turkey - a capsule purported to be narcotic but filled with a non-narcotic substance
Turned off - withdrawn from drugs
Turned on - under the influence of drugs
Twist - marijuana cigarette

Uncle - federal narcotics agent
User - one who uses narcotics

Vic - one who has been given a hot shot, a victim

Wake-ups - amphetamines
Washed up - withdrawn from drugs
Wasted - under the influence of drugs
Weed - marijuana
Weed-head - marijuana user
Weekend habit - small, irregular drug habit
Whiskers - Federal narcotics agents
Whites - amphetamine sulfate tablets
Wired - under the influence of drugs
Works - the equipment for injecting drugs

Yellow-jackets - 'Nembutal' (brand of pentobarbital, Abbot Laboratories) capsules, solid yellow
Yen - desire for narcotics
Yen Hook (Hock) - instrument used in opium smoking
Yen Shee - opium ash
Yen Shee Suey - opium wine
Youngblood - young person starting to use marijuana

APPENDIX H

AUDIO-VISUAL MATERIALS

MATERIALS AVAILABLE FROM THE RHODE ISLAND DEPARTMENT OF HEALTH

The following films and filmstrips on drugs are available at the Department of Health Film Library and are provided as a public service. Reservations should be made as far in advance as possible.

Films should be picked up and returned to Room 101H State Office Building, Providence.

Only experienced, qualified operators should be used when showing films. Severe damage to films will be the financial responsibility of the person to whom the film is loaned.

The attendance sheet enclosed with each film should be filled in and returned with the film.

DRUGS AND THE NERVOUS SYSTEM 16 mm. color 16 minutes
Junior and Senior High

The effects of drugs on organs and body systems are surveyed using aspirin to illustrate how a common drug works on the nervous system to reduce pain and fever. The film explains the serious disruption of the nervous system caused by narcotics. Substances covered are airplane glue, stimulants, (amphetemines), depressants, (barbiturates and opiates), hallucinogens, (marijuana and LSD). An animated film.

DRUGS -- HELPFUL OR HARMFUL filmstrip color 12½ minutes
Fifth and Sixth Grades

This filmstrip was designed to assist pupils in grades 5 and 6 to develop wholesome attitudes toward drugs and to make wise personal choices concerning their safe use.

HOOKED 16 mm. black & white 20 minutes
Senior High, College and Adults

This is a powerful, sometimes shocking description of drug addiction told in the words of a group of young former addicts. It is not the voice of authority, but of experience.

MARIJUANA 16 mm. color 34 minutes
Junior and Senior High, College and Adults

Marijuana is the result of information gained after months of research and interviews with teenagers and young adult users of the drugs, as well as doctors,

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psychiatrists, and law enforcement and narcotics officers. It is not just another general, scare-film about drugs. Instead it focuses directly on the most frequently voiced reasons given by the marijuana user in behalf of its use and legalization.

NARCOTICS -- THE DECISION	16 mm.	color	30 minutes
	Senior High, College and Adults		

A dramatic case history type presentation of a teenage girl's introduction to and continuing use of narcotics. Characteristic individual and group behavior of addicts are interpreted which include the initial period of the teenager "getting hooked" to the final stages of another long-term addict going through the withdrawal period. The secrecy and undercover operations of their pursuits, making law enforcement efforts difficult, is well shown in the film.

SNIFFY ESCAPES POISONING	16 mm.	color	6½ minutes
	Primary Grades		

Geared directly for primary grades, this film explains, in language and action he can understand, just why he should not take medicine and unknown substances himself.

YOUR AMAZING MIND	16 mm.	color	16 minutes
	Junior and Senior High		

The refreshing and positive approach to the drug dilemma which this film uses would suggest a new method of approaching the problem, by challenging junior high pupils to set their sights on the marvelous accomplishments of the human mind, rather than to allow the mind to be damaged and unproductive. Factual rather than moralizing or scaring.

MATERIALS AVAILABLE FROM THE RHODE ISLAND DEPARTMENT OF EDUCATION FILM LIBRARY

BEYOND LSD	25 minutes - color	Film Associates, 11559 Santa Monica Blvd., Los Angeles, Calif. 90025

This film is about the communication gap between two generations: teenagers and young adults on the one hand, and those over thirty -- "the establishment" -- on the other. The teenagers' use of LSD and other drugs is only one of the symptoms of this communications gap. In this film, a group of parents seek help in order to understand why alienation between parents and children may lead to drug use. It is intended to stimulate thought and motivate discussions among parents, students, and teachers.

DRUG ABUSE: THE CHEMICAL TOMB

Film Distributors International
2223 South Olive St., Los Angeles,
California

This film tells who is using drugs, the effects of different drugs, the types of drugs and their danger. Portrays the cycles which take place from the effects of certain drug types. Explains the effects of drugs on teenagers. Film has a good explanation of marijuana or pot.

DRUGS AND THE NERVOUS SYSTEM 18 minutes - color

This beautifully filmed presentation discusses some basic and vital facts about misuse of airplane glue, stimulants, depressants, marijuana and LSD. The major portion of the film explains the serious disruption of the nervous system caused by using these substances for "kicks." While the film emphasizes the dangers of drug abuse, it does so without sermonizing. The descriptions of the actions of abused drugs are enhanced by a good musical score and fascinating animation sequences. Highly recommended. Particularly appropriate for junior high school students, but recommended for junior and senior high school.

ESCAPE TO NOWHERE 25 minutes - color

Professional Arts Corp., Universal
City, Calif., P.O. Box 8484

Real-life story of drug use told "like it is" by kids who use drugs...But mostly told by Debbie, whose "escape" drugs have been. For 25 compelling minutes, you and your young audiences will become a part of Debbie's world. To go where she goes, see what she sees, and feel what she feels about life and the many different drugs which have been such an important part of her ESCAPE TO NOWHERE. There is no "moralizing" in ESCAPE TO NOWHERE. The message that drugs are cop outs comes from the drug users; not "the establishment," The result is a unique film with unique strategies, reaching and impressing audiences. They won't quickly forget Debbie....and neither will you.

HIDE AND SEEK

Center for Mass Communication of Columbia University Press,
440 West 110 Street, New York, New York 10025

This is a boy's personal story of his life as an addict. Starting with his initiation to drugs, the film follows his steady mental and physical deterioration. What clearly emerges is the boy's remorse, his insurmountable loneliness, and extreme anguish. He talks constantly about the things he's lost through addiction. The events in the film are actual experiences, with the narration by the addict himself.

HOOKED 20 minutes - black and white

Excellent film. Young people, (ages 18 to 25), in what appears to be a security institution, describe their experiences with drug addiction. The descriptions are uninhibited, sometimes shocking, and make frequent use of addicts' jargon. The young people speak with candor about what impelled them to use drugs, how drug abuse affected their relationships with others, and the disgust with which they now regard their drug experiences.

LSD--25 27 minutes - color
Professional Arts, Inc., P.O. Box 8484
University City, Calif. 91608

An excellent color film which provides a current, accurate and balanced view of LSD use. Emphasizing the unpredictability of the drug and its terrifying power, the film succeeds is discouraging LSD experimentation without adopting a "preachy" tone. It is also superior from a visual and technical point of view, and should hold the interest of the most sophisticated audiences. Recommended for high school through college.

LSD: INSIGHT OR INSANITY 28 minutes
reissued 1968
Bailey Films, 6509 DeLongpre Ave.
Hollywood, Calif. 90028

This film documents the dangers in the unsupervised use of LSD, explains what medical science knows of the physiologic actions of LSD and counteracts a few of the erroneous claims made for the use of LSD. Good to excellent technical accuracy, effectiveness in reaching the desired audience and in dramatic impact. Rated best for senior high school students and college students and above average when compared with other films on the same subject. Excellent sound track. Chromosome damage scene rated best; Russian roulette scene was most controversial.

MARIJUANA 34 minutes - color
Bailey Films, 6509 DeLongpre Ave.
Hollywood, California 90028

The film examiner reasons some teenagers give for smoking "pot" and rationally exposes these reasons for what they are. There are also interviews from throughtout the country in which teenagers present their frank and disturbing reasons for rejecting the adult world's expected behavior norms for teenagers. For balance, the film then asks opinions from among the vast majority of teenagers who do not take drugs. All arguments for and against the use of marijuana are presented objectively and unemotionally. The accumulation of honest argument is showed to speak for itself. Recommended for junior and senior high school, college and adult audiences.

NARCOTICS: A CHALLENGE 24 minutes - color
The Narcotic Educational Foundation
of America, 5055 Sunset Blvd., Los
Angeles, California 90027

Basic information about narcotics and other drugs of abuse; for educators.

NARCOTICS: PIT OF DESPAIR 25 minutes - color Film Distributors Int'l., Inc. 1967

Designed to teach perils of narcotics addiction to youngsters. Indicates how inexperienced young people are led to seek refuge in tobacco, alcohol and barbiturates when questionable friends introduce marijuana and opiates. Resultant addiction and problems of withdrawal are included. Requires qualified professional discussion leader. Senior high and above.

NARCOTICS - WHY NOT? 15 minutes - color Charles Cahill & Associates, Inc.
16 mm. P.O. Box 3220, Hollywood, Calif.

A series of extemporaneous interviews with teenagers and young adults who have taken narcotics. These individuals, residents of the California Rehabilitation Center, relate how they were introduced to narcotics, what it was like to be under the influence of narcotics, why they wished they hadn't used drugs or narcotics, and what the future holds for them. The misery of narcotics addiction, as related by these people, provides a vivid and memorable answer to the question in the film's title for teenagers and young adults who are increasingly exposed to the temptation of experimenting with drugs.

POT'S A PUT ON 10 minutes - color Professional Arts Corp., Universal
City, P.O. Box 8484, Calif. 91608

This film is a one sided picture of the "hippie" world, pointing out the unreality of their life. The film portrays what our world would be if "grass", marijuana was legalized -- the people would lack the ability to assume responsibility. Young approach, film good for middle grades.

THE DANGEROUS DRUGS 22 minutes The Narcotic Educational Foundation
of America, 5055 Sunset Blvd, Los
Angeles, California 90027

This film vividly portrays the dangers from abuse of amphetamines and barbiturates.. accidents, physical dependence, (from barbiturates), ruined health, even death. A candid account by a female abuser dramatically and forcefully underscores these dangers. The potential relationship of heroin abuse and abuse of non-narcotic drugs is noted. Suited for high school, college, and general public.

THE LOSERS 31 minutes - black & white WCBS-TV New York, 1965, Carousel
Films, Inc., 1501 Broadway, N.Y.

Fine exposition of the drug abuse problem in relation to teenagers. Film examines the prevalence and habitual use of chemicals and drugs among people from 12 to 21. Actual experiences are recounted by youths from both slums and "nice" neighborhoods. Although it deals with the problem in New York City, this kinescope of a TV program makes points applicable anywhere. Especially noteworthy is a clear presentation of the harmful effects of glue-sniffing, and the use of marijuana, stimulants, depressants and heroin. Suited for junior high through high school.

THE BALLARD OF MARY JANE

Professional Arts Corp., Universal City
California, P.O. Box 8484, 91608

THE BALLARD OF MARY JANE is a 20 minute 16 mm. color sound film in which "Mary Jane" tells her own story. In the BALLARD OF MARY JANE, Mary Jane herself tells the story of "her history," "her chemistry," and most important of all, "her physiological and psychological effect on her young audience." The film has received the pre-production endorsement of the Bureau of Narcotics and Dangerous Drugs.

THE TRIP BACK

Sterling Movies, 43 West 61 St.,
New York, New York 10023

This film looks at the world of drugs through the eyes of a fifty year old woman who spent most of her life under the influence of hard drugs. Her life is now being spent trying to reach young people, telling her story of the harm and tragedy resulting from taking drugs, especially the "hard" drugs. The film is well done, excellent for secondary school students.

FILM STRIPS AND RECORDINGS

DRUGS

Raytheon Health Education Programs,
Raytheon Learning Systems Co. Set
Part Number 206001 04

10 color filmstrips with 33 1/3 r.p.m. automatic records. This is a complete drug abuse teaching program developed to present the student with good factual information about drugs. Besides the filmstrips and records, the kit contains a teacher's manual and scripts on each part or unit.

Part One - Introduction to Drugs
Part Two and Three - Barbiturates and Amphetamines
Part Four and Five - Marijuana
Part Six and Seven - LSD and LSD Type Drugs
Part Eight - Narcotics
Part Nine and Ten - Teenagers and Drugs

DRUGS -- HELPFUL OR HARMFUL

filmstrip color 12½ minutes
Fifth and Sixth Grades

This filmstrip was designed to assist pupils in grades 5 and 6 to develop wholesome attitudes toward drugs and to make wise personal choices concerning their safe use.

APPENDIX I

ANNOTATED BIBLIOGRAPHY

BOOKS AND BOOKLETS

The Addict in the Street. Edited by Jeremy Larner from tape recordings collected by Ralph Tefferteller. New York: Grove Press, Inc. 1964.

This book contains the first person stories of heroin addicts who live in constant threat of degradation, arrest and torture. It shows the wide gulf that exists between the addict's needs and desires and his own self-portrait.

Alpert, R., Cohen, S., Schiller, L. *LSD.* New York: New American Library, 1966.

This book should help educators to obtain a balanced view of the present LSD controversy. Its pictorial presentations highlight the emotional nature of the LSD experience.

Ausebel, David P. *Drug Addiction: Physiological, Psychological and Sociological Aspects.* New York: Random House, 1958.

This book contains many helpful insights into the various aspects of drug addiction.

Blum, Richard H. and Associates. *Utopiates: The Use and Users of LSD-25.* New York: Atherton Press, 1964.

This book discusses the legal, social and psychopharmacological aspects of LSD as well as its use in many different settings.

Chein, Isidor. *The Road to H: Narcotic, Delinquency and Social Policy.* New York: Basic Books, 1964.

A study of heroin use among different ethnical groups of teenagers in New York. This book distinguishes four stages in involvement with drugs: experimentation, occasional use, habitual use and regular use with efforts to break the addiction.

Cohen, Sidney. *The Beyond Within: The LSD Story.* New York: Atheneum, 1964.

A discussion of good and bad "trips" caused by using LSD, this book is written by a psychiatrist who was one of the early investigators of the effects of LSD.

Curtis, Lindsay R. *Let's Talk About Drugs.* Dallas: Tane Press, 1967.

Written concisely and using a question-answer approach, this booklet should appeal to youth. It discusses general aspects of marihuana and LSD abuse, glue-sniffing, as well as the misuse of barbiturates, amphetamines and tranquilizers.

Drug Abuse: A Manual for Law Enforcement Officers. 2nd edition. Philadelphia: Smith Kline and French Laboratories, 1966.

Although this manual is designed for law officers, in it there are several sections which could be quite informative to teachers, especially those sections which deal with drug groups subject to abuse, the drug abuser, the illegal traffic in dangerous drugs and the drug industry's security methods.

Drug Abuse: A Reference For Teachers. Trenton: New Jersey State Department of Education, 1967.

The Chapter on "The Role of the School" provides excellent suggestions for incorporating an attack on drug abuse in the school's program.

Drug Abuse: A Source Book and Guide for Teachers. Sacramento: California State Department of Education, 1967.

Although primarily designed for instructors in California, there are two excellent chapters on instruction in this source book. This guide also contains objective tests designed to measure the student's knowledge of drug abuse information.

Drug Abuse: Escape to Nowhere. Philadelphia: Smith Kline and French Laboratories, 1967. (Available from the National Education Association, Publication-Sales Department, 1201 Sixteenth St., N.W., Washington, D.C. 20036).

This excellent guide for educators discusses the drugs of abuse and their effects, the various methods of therapy for the drug abusers, the educational approaches that can be utilized and the problems of abuser identification.

Glaser, Daniel and O'Leary, Vincent. *The Control and Treatment of Narcotic Use.* Washington, D.C.: U.S. Government Printing Office, 1966.

This booklet discusses the physiological effects of narcotic drugs, historical and psychological factors involved in Narcotics abuse and the various types of treatment.

Harms, Ernest (ed.). *Drug Addiction in Youth.* Oxford: Pergamon Press, 1965.

This volume, the results of the efforts of persons who have worked with young drug addicts, covers many of the major aspects of juvenile drug addiction in an informative manner. Different authorities have contributed to this volume, writing on topics such as narcotic addiction among the newborn, psychopathology of drug addiction, and religion and narcotic addiction among juveniles.

Hollander, Charles (ed.). *Student Drug Involvement.* Washington, D.C.: United States National Student Association, 2115 S Street, 20008, 1967.

This publication deals with the history, sociology, psychopharmacology and legality of drug use as well as the student drug involvement.

International Control of Narcotic Drugs. New York: United Nations Publications, 1965.

This booklet describes the methods and scope of international narcotics control, the history leading to the present system of control, the types of drugs under international control and the suppression of illicit traffic in narcotic drugs.

Kolb, Lawrence. *Drug Addiction: A medical problem.* Springfield, Illinois: Charles C. Thomas, Publishers, 1962.

This book's purpose is to increase the reader's understanding of drug abuse and to encourage development of control and treatment programs. The whole book attempts to point out that drug abusers should not be treated as hardcore criminals, false propaganda should stop and drug dependency should be treated as a health problem.

Kreig, Margaret. *Black Market Medicine.* Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1967.

This book reveals the people who produce and distribute illegal pharmaceuticals, as well as afford-

ing a view of many of the undercover activities involved with drug abuse control.

Kreig, Margaret B. *Green Medicine.* Chicago: Rand McNally and Company, 1964.

This book discusses the scientific interest in medicinal plants and the research in both laboratory and jungle for botanical drugs that cure.

Lindesmith, Alfred R. *The Addict and the Law.* Bloomington: Indiana University Press, 1965.

By presenting relevant materials of an historical and a current nature, the author discusses issues involved with addiction and the law.

Lin-Fu, Jane S. *Neonatal Narcotic Addiction.* Washington, D.C.: Children's Bureau, 1967.

This booklet contains a summary of information available on neonatal narcotic addiction, based on a review of literature.

Livingston, Robert B. *Narcotic Drug Addiction Problems.* Proceedings of the Symposium on the History of Narcotic Drug Addiction Problems, March 27 and 28, 1958, Bethesda, Maryland. Washington, D.C.: U.S. Government Printing Office, 1958.

While reading this book, the reader must remember to keep the content in historical perspective. Some of the material gives quite a good insight into various facets of the drug addiction problem.

Louria, Donald B. *Nightmare Drugs.* New York: Pocket Books, Inc., 1966.

Written by a physician, this paperback discusses stimulants, heroin, sedatives, tranquilizers and hallucinogens, as well as addiction and the laws.

Matthews, Jay De. *Narcotics Legislation: Its Effects on Narcotics Traffic.* Elizabethtown, Pennsylvania: 1968. Unpublished work.

A student's study of the effect of legislation on the narcotics traffic.

Maurer, D. W. and Vogel, V. H. *Narcotics and Narcotic Addiction.* 3rd ed. Springfield, Illinois: Charles Thomas, Publishers, 1967.

This book is an attempt to describe the various drugs of addiction and to report on the physiological effects of these drugs. Some generalizations are made in reference to the social implications of addiction.

Medicinal Narcotics. Washington, D.C.: Pharmaceutical Manufacturers Association (1155 Fifteenth St., N.W. 20005), 1965.

This booklet describes the various governmental controls over narcotics, points out the cornerstone of medicinal narcotics control and stresses the need for uniformity in laws and terminology as the foundation for effective enforcement of regulations. Recommended for high school student use.

Mental Health Monograph 2. *Narcotic Drug Addiction.* Washington, D.C.: U.S. Government Printing Office, 1965.

Recommended for reading by high school students, this booklet covers many of the more important aspects of narcotics drug addiction.

Nowlis, Helen H. *Drugs on the College Campus.* Detroit: National Association of Student Personnel Administrators (Suite 405, 5440 Cass Avenue, 48202), 1967.

This handbook, although it primarily applies to the use of drugs by college students, attempts to clarify some of the issues and implications involved with drug abuse.

Prevention and Control of Narcotic Addiction. Washington, D.C.: U.S. Government Printing Office, 1966.

Discussion of the historical aspects of the control of narcotic abuse with a view toward establishing two points: (1) compulsory hospitalization of narcotic abusers (2) effective policing.

Psychedelics and the College Student. Princeton: Princeton University Press, 1967.

This booklet was written by college students for college students. Although the information is not presented from a professional viewpoint of psychedelics, it does point out that the drug question can no longer be avoided.

Psychosocial Aspects of Drug-Taking. Proceedings of a one day conference held at University College, London. Oxford: Pergamon Press, 1965.

Although this booklet discusses the drug dependency situation in England, some of the information on causes and motives of drug abuse and the role of education in preventing drug abuse may be helpful to the teacher.

Saltman, Jules. *What We Can Do About Drug Abuse.* Public Affairs Pamphlet No. 390. New York: Public Affairs Committee, Inc. (381 Park Avenue, South, 10016), 1966.

This booklet shows that the many-faceted problem of drug abuse calls for many solutions. It makes interesting as well as informative reading for students.

Services for the Prevention and Treatment of Dependence on Alcohol and Other Drugs. Fourteenth Report of the WHO Expert Committee on Mental Health. World Health Organization Technical Report Series No. 363. Geneva: WHO, 1967.

This report discusses the problems of dependence on drugs, the types of programs needed to combat drug dependence and the areas of research that still need to be explored.

Task Force Report: Narcotics and Drug Abuse. Washington, D.C.: U.S. Government Printing Office, 1967.

This report contains the findings and recommendations relating to narcotics and drug abuse made by the President's Commission on Law Enforcement and Administration of Justice in *The Challenge of Crime in a Free Society.* It also contains much information on mind-altering drugs relative to dangerous behavior and proposals for dangerous drug legislation.

Vogel, Victor H. and Virginia E. *Facts about Narcotics and Other Dangerous Drugs.* Chicago: Science Research Associates, Inc., 1967.

This booklet contains a storehouse of information on the different types of drugs and their effects. It is a good reference for students.

Wilkerson, David. *Twelve Angels From Hell.* Westwood, New Jersey: Fleming H. Revell Company, 1965.

This book illustrates the personalities of twelve different hard-core drug addicts and depicts the changes that occurred in their lives as a result of spiritual experiences.

Wilkerson, David, with John and Elizabeth Sherill. *The Cross and the Switchblade.* Westwood, New Jersey: Fleming H. Revell Company, 1963.

Although this book is not primarily concerned with drug abuse, it does afford the reader a view of the physical and emotional environment of the drug

abuser in the "asphalt jungle." It also stresses the necessity for demonstrating love for the adolescents who abuse drugs.

Wilner, Daniel M. and Kassebaum, Gene G. (eds). *Narcotics*. New York: McGraw-Hill Co., 1965.

This volume discusses the problems of drug use from the perspective of an epidemiologic model of the interaction of host (drug dependent personality), agent (pharmacological substance abused) and the environment which promotes drug abuse.

Winick, Charles. *The Narcotic Addiction Problem*. New York: The American Social Health Association (1790 Broadway, 10019), n.d.

This booklet is a statement of the narcotic addiction problem in the United States and a brief presentation of the program that the American Social Health Association has initiated in order to combat drug abuse.

Winick, Charles and Goldstein, Jacob. *The Glue Sniffing Problem*. New York: The American Social Health Association (1790 Broadway, 10019), n.d.

This booklet describes the practice of glue sniffing, its effects, its relationship to drug dependent and some etiological factors involved.

Yablonsky, Lewis. *The Tunnel Back*. New York: MacMillan and Company, 1965.

A description of Synanon's methods of treatment for drug addiction.

PERIODICALS

"Addicted!" *Good Housekeeping*. Volume 164 (May, 1967). pp. 12+

A personal narrative of a woman who became dependent upon diet pills. This article should assist the student in understanding the dangers involved in abusing prescription drugs.

Becker, Howard S. "History, Culture and Subjective Experience: An Exploration of the Social Bases of Drug-Induced Experiences." *Journal of Health and Human Behavior*. Volume 8, Number 3 (September, 1967). pp. 163-76.

This article develops a model based on cultural and social organization in an effort to explain the incidence of drug-induced psychoses, especially as related to LSD and marihuana.

Bewley, T. H. "Some Social, Psychological and Environmental Factors Associated with Drug Dependence." *The Health Education Journal*. Number 26 (May, 1967). pp. 60-66.

This article discusses the social organization of drug taking, the personalities of addicts, the environment of addicts and the relationship of drug addiction to delinquency.

Bloomquist, Edward R. "Let's Think Twice About 'Free' Narcotics." *GP*. Volume 21, Number 5 (May, 1960) pp. 156-62, and Volume 21, Number 6 (June, 1960) pp. 149-55.

These two articles attack the idea that "free" narcotics should be distributed to addicts. A comparison is made between the so-called "British System" and the American way of handling addicts.

Bloomquist, Edward R. "What Makes Teens Try Dope?" *Parents' Magazine*. (February, 1960). (Reprint available from *Parents' Magazine*, 52 Vanderbilt Avenue, New York, N. Y. 10017)

This article describes methods parents can utilize to help their children avoid drug abuse.

Brill, Henry and Larimore, Granville W. "Second On-Site Study of the British Narcotic System." *NACC Reprints*. (June, 1967).

This booklet points out the current situation on drug addiction in Britain and the modifications that are occurring in the "British System."

Brill, Leon. "Drug Abuse as a Social Problem." *International Journal of the Addictions*. Volume 1, Number 2 (June, 1966).

This paper highlights the sociological parameters of the addiction problem as well as the dramatic changes in perspective which have occurred in recent years.

Brodsky, Philip. "Drug Plant Inspection." *FDA Papers*. (May, 1967) pp. 7-14.

This article describes what an FDA inspector looks for when he is inspecting a pharmaceutical manufacturing plant.

Bulletin on Narcotics.

A bimonthly publication of the United Nations, New York. It depicts the narcotic problem on the international level.

Carner, Charles. "Surprise Inside: Strange Effects of Drugs." *Today's Health*. (April, 1967) pp. 57-59+.

This article points out how drugs purchased OTC (over-the-counter) can lead to serious complications for persons who misuse them.

Caruanta, S. "'Drugs'—A Social, Medical or Educational Problem?" *The Health Education Journal*. Volume 25 (November, 1966) pp. 184-91.

This article discusses the various types of drug dependence, the personality of the drug-taking adolescent, the various groups of drugs abused and the role of health education in preventing an actual drug abuse situation.

Casselman, Bernard W. "You Cannot Be a Drug Addict Without Really Trying." *Diseases of the Nervous System*. Volume 25 (March, 1964) pp. 161-63.

This article advocates seeking the causes of drug addiction so that preventive measures can be applied.

"Clinical Testing: Synopsis of the New Drug Regulations." *FDA Papers* (March, 1967) pp. 21-25.

An explanation of regulations involved with clinical testing of new drugs.

Cohen, Allan Y. "Acid is Not as Advertised." *American Red Cross Journal*. Volume 44, No. 3 (December, 1967) pp. 18, 19.

A former associate of Dr. Timothy Leary explains why he stopped using LSD.

Cohen, Maimon M., Hirschborn, Kurt, and Frosch, William A. "In Vivo and In Vitro Chromosomal Damage Induced by LSD-25." *The New England Journal of Medicine*. Volume 277, Number 20 (November 16, 1967) p. 1043.

A report of a study which convinced the authors of this article that the use of LSD causes a higher incidence of chromatid breakage than the non-use of LSD.

Curtis, Lindsay R. "LSD." *Listen*. Volume 21, Number 2. (February, 1968) pp. 5, 6.

This article, written by a physician to young people, summarizes what is known about psychedelics.

Dalrymple, Willard. "A Doctor Speaks of Marijuana and other 'Drugs'." *Journal of the American Col-*

lege Health Association. (Reprinted by permission of *University:* a Princeton Quarterly, 1965). Volume 14 (February, 1966) pp. 218-22.

This article, in the form of a dialogue, could be especially helpful and interesting to students. It discusses the relationship of drugs to the mental health of individuals and the community.

"Dependence on Amphetamines and other Stimulant Drugs." *Journal of the American Medical Association.* Volume 197, Number 12 (September 19, 1966) pp. 1023-27.

Prepared by the AMA Committee on Alcoholism and Addiction, this statement is one in a series on drug dependence.

"Dependence on Barbiturates and Other Sedative Drugs." *Journal of the American Medical Association.* Volume 193, Number 8 (August 23, 1965) pp. 673-77.

One of the series of statements regarding drug dependence, this article was prepared by the AMA Committee on Alcoholism and Addiction.

"Dependence on Cannabis (Marihuana)." *Journal of the American Medical Association.* Volume 201, Number 6 (August 7, 1967) pp. 368-71.

One of the series of statements regarding drug dependence, this article was prepared by the AMA Committee on Alcoholism and Drug Dependence.

"Dependence on LSD and other Hallucinogenic Drugs." *Journal of the American Medical Association.* Volume 202, Number 1 (October 2, 1967) pp. 47-50.

One of the series of statements regarding drug dependence, this article was prepared by the AMA Committee on Alcoholism and Drug Dependence and the Council on Mental Health.

Dole, Vincent P. and Warner, Alan. "Evaluation of Narcotics Treatment Programs." *American Journal of Public Health.* Volume 57, Number 11 (November, 1967) pp. 200-08.

This article points to the chaotic condition of the present system of reporting of narcotics treatment programs. It also contains a rather extensive selected bibliography on narcotic addiction treatment from 1960 to 1966.

"Drug Abuse." *Journal of the American Pharmaceutical Association.* Volume N58, No. 1 (January, 1968).

Much of this issue is devoted to drug abuse. The drugs of abuse, a history of drug abuse, psychotomimetic agents, and the pharmacist's role in drug abuse education are discussed. Several featurettes on drugs are also included.

"Drugs." *Health Information Digest.* Volume 11, Number 2 (July, 1967) pp. 78-87.

Interesting highlights from 14 recent articles on many aspects of drugs such as: clinical impressions of drug abuses, legal actions against addicts and personality of the drug abuser.

"Drugs." *World Health.* (July, 1967) pp. 1-40.

An excellent pictorial portrayal of the problems associated with drug abuse on the international level. This article takes a comprehensive and quite interesting look at drugs. Recommended for senior high school students.

Drugs of Abuse. (Reprint from *FDA Papers*, July-August, 1967). Washington, D. C.: U. S. Government Printing Office.

Pictorial description of various types of stimulants, depressants and hallucinogens. It describes why the various drugs are taken and what symptoms an abuser would exhibit when under the influence of these drugs.

Eddy, Nathan B., Halbach, H., Isbell, Harris, and Seevers, Maurice H. "Drug Dependence: Its Significance and Characteristics." *Bulletin World Health Organization.* Volume 32 (1965) pp. 721-33.

A description of the various types of drug dependence and the rationale behind the use of the term "drug dependence."

Garrett, Dan. L., Jr. "Synanon: the Communiversity." *Humanist.* (September-October, 1965) pp. 185-89.

A vivid description of Synanon's philosophy, methods and psychology. (Available from Synanon Foundation, Inc. 1351 Ocean Front, Santa Monica, California 90401).

Glatt, M. M. "Problems Common to Alcoholism and Drug Dependence." *WHO Chronicle.* Volume 21, Number 7 (July, 1967) pp. 293-302.

This article discusses the similarities between dependence on alcohol and dependence on drugs especially in respect to etiological and developmental factors.

Goddard, James L. "Criminal Abuse of 'Dangerous Drugs'." *The Forensic Quarterly.* Volume 41, Number 3 (August, 1967).

This article stresses that the drug abuse problem in the United States is not an easily solvable problem.

"Good Manufacturing Practice." *FDA Papers.* (April, 1967) pp. 22-25.

A description of FDA's activities to assure that good manufacturing practices are being implemented by pharmaceutical firms.

Harms, Ernest. "Remedies for Drug Abuse–Right and Wrong." *Adolescent.* Volume II, Number 5 (Spring, 1967) pp. 1-4.

This editorial stresses the need to understand the world of youth in order to obtain a proper perspective on what should be done to eradicate the deep impulses which lead to drug abuse.

International Journal of Addictions.

A publication devoted to the scientific study of drug use and abuse. It is published semi-annually by the Institute for the Study of Drug Addiction, 680 West End Avenue, New York, N. Y. 10025.

Kleber, Herbert D. "Prolonged Adverse Reactions from Unsupervised Use of Hallucinogenic Drugs." *The Journal of Nervous and Mental Disease.* Volume 1, Number 4 (1967) pp. 308-19.

This article reviews some of the factors that have brought about the drug fad and present a report of five cases that have suffered adverse reactions from drug experimentation.

Kleber, Herbert D. "Student Use of Hallucinogens." *Journal of the American College Health Association.* Volume 14 (1965) pp. 109-17.

This study of 21 college students attempted to learn more about students who abuse drugs, the patterns of abuse, and the effects that abuse had on the students' lives. Some of the information is quite revealing about the students.

Lang, Irving. "Narcotics Legislation—A Total Approach." *NACC Reprints* (June, 1967) (From *The Catholic Lawyer.*)

A description of New York's attempt to deal with drug abuse on a massive scale.

Lasher, Lewis P. "LSD: The False Illusion." *FDA Papers.* (September, 1967).

A look at LSD from the viewpoint of one of FDA's Criminal Investigators. Some Characteristics of LSD users are described.

Levine, Jerome and Ludwig, Arnold M. "The LSD Controversy." *Comprehensive Psychiatry.* Volume 5, Number 5 (October, 1964) pp. 314-21.

The authors attempt to answer the question: do the purported dangers and risks associated with the use of LSD outweigh any benefits that could possibly be derived from it?

Listen, 1350 Villa Street, Mountain View, California 94040.

This journal of better living talks about smoking and drinking as well as narcotics and is designed primarily for young people.

Louria, Donald B. "Cool Talk About Hot Drugs." *NACC Reprints.* (December, 1967).

This article attempts to peel away some of the misconceptions about LSD, marihuana and heroin. It is highly interesting and should be especially useful to high school students.

Lyle, David. "The Logistics of Junk." *Esquire* (March, 1965) pp. 59-67+.

A personal narrative of a drug addict coupled with information on the world-wide traffic in narcotics make this article quite captivating.

"Medicines and Your Family's Health." Second in a series published by the Pharmaceutical Manufacturers Association, Washington, D. C. 20005. *Reader's Digest.* Volume 92, Number 550 (February, 1968) pp. M1-M8.

The content in these pages describes some of the values of properly used drugs. Excellent reading material for secondary level students.

Mental Health Digest. National Clearinghouse for Mental Health Information. National Institute of Mental Health, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20203.

Although this periodical reflects the whole spectrum of mental health and presents a broad sampling of subject matter and professional points of views, there are articles dealing with specific aspects of drug abuse.

'Misuse of Valuable Therapeutic Agents: Barbiturates, Tranquilizers and Amphetamines." A Report by the Committee on Public Health, the New York Academy of Medicine. Volume 40, Number 12 (December, 1964) pp. 972-79.

A study of the hazards of drug abuse with a review of historical approaches toward the problem as well as a list of remedies which can now be utilized to tackle the drug abuse problem.

"New Insights . . . Narcotic Addiction: Problems/Progress/Prognosis." *Illinois Medical Journal.* Volume 130, Number 4 (October, 1966).

This journal contains the proceedings of the Illinois State Medical Society's Conference on Narcotic Addiction. Many different aspects of drug abuse are discussed with a view toward finding the best in each and many conflicting ideas and synthesizing them into a constructive program.

"Prevention and Control of Drug Abuse: Statement of Needs and Principles." *Social Health News.* Volume 42, Number 7 (October, 1967) pp. 3-4.

These principles were adopted as a position paper by the Board of Directors of the American Social Health Association and serve as ASHA's guideline statements for program proposals for communities.

Radin, Sherwin S. "Psychosocial Aspects of Drug Addiction." *The Journal of School Health.* Number 36 (December, 1966) pp. 481-87.

This article attempts to answer some of the questions related to the psychosocial phenomena of drug abuse.

Rankin, Winton B. "National Drug Testing Center." *FDA Papers.* (May, 1967) pp. 4-6.

A description of a new approach to drug control.

Rehling, C. J. "Drugs and the Driver." *Traffic Safety.* (Reprint available from National Safety Council, 425 N. Michigan Avenue, Chicago, Illinois 60611).

A description of the ways in which narcotics, barbiturates, amphetamines, anti-histamines and tranquilizers can affect driving.

Rosenhouse, Leo. "STP: A Deadly Trip." *Listen.* Volume 21, Number 2 (February, 1968) pp. 8, 9.

This article, written for young people, tells about the STP situation in San Francisco's Haight-Ashbury District. It also describes some physiological and social factors associated with STP abuse.

Rosenthal, Theodore, Patrick, Sherman W., and Krug, Donald C. "Congenital Neonatal Narcotics Addiction: A Natural History." *American Journal of Public Health.* Volume 54, Number 8 (August, 1964) pp. 1252-62.

A discussion of the factors involved in congenital neonatal narcotic addiction and steps that should be initiated to control such situations.

Ruskins, Arthur. "Drug Experience Reporting." *FDA Papers* (April, 1967) pp. 13-16.

A description of the new adverse reactions task force's operation and function.

Sadusk, Joseph F., Jr. "Size and Extent of the Problem." *Journal of the American Medical Association.* Volume 196, Number 8 (May 23, 1966) pp. 707-09.

Discussion of diversion of non-narcotic drugs from legitimate to illegitimate channels.

Samuels, Gertrude. "Where Junkies Learn to Hang Tough." Reprint from *New York Times,* (May, 1965). (Available from Synanon Foundation, Inc., 1351 Ocean Front, Santa Monica, California 90401).

This article describes the operation of Synanon and its approaches toward drug addicts.

Schreiber, Flora Rheta and Herman, Melvin. "New Hope for Drug Addicts," *Science Digest.* Volume 60, Number 1 (July, 1966) pp. 15, 16.

Addicts can and do become useful members of society. Factors upon which successful recovery depends are discussed in this article.

Selby, Earl and Anne. "Pills, Glue and Kids: An American Tragedy," *Reader's Digest.* Volume 88 (June, 1966) pp. 66-70.

A "popular literature" article on juvenile drug abuse and ways to combat it.

Skous[illegible]W. Cleon. "The 'Instant Insanity' Drugs," *Law and Order*, Volume 15, Number 9 (September, 1967) pp. 83-87.

This paper describes the dangers of the abuse of LSD, as well as suggesting six steps to counterattack the increasing prevalance of drug abuse.

Smith, Jean Paul. "LSD: The False Illusion," *FDA Papers*, (July-August, 1967) pp. 10-18.

The LSD problem is presented from a psychologist's point of view in this article.

The Attack on Narcotic Addiction and Drug Abuse. Albany, N. Y.: New York State Narcotic Addiction Control Commission, 12203.

A publication devoted to publicize the activities of the New York State Addiction Control Commission and to explain various aspects of drug abuse.

Ungerleider, J. Thomas and Duke, D. Fisher. "The Problems of LSD 25 and Emotional Disorders," *California Medicine*, Number 106. (January, 1967) pp. 49-55.

A description of the physiological and psychological effects of LSD with information on the acute and chronic side effects noted among LSD users.

Weech, Alexander A. "The Narcotic Addict and 'The Street,'" *Archives of General Psychiatry*, Volume 14 (March, 1966) pp. 299-306.

A study of the environment of the individual who is dependent upon drugs and the priority that peer activities have for him over family relationships.

Winick, Charles. "Drug Addiction and Crime," *Current History*, (June, 1967) pp. 349-54.

An authoritative discussion of the illegal distribution system of drugs and the effects of treatment programs, as well as an attempt to answer the question: does crime antedate addiction?

Winick, Charles and Bynder, Herbert. "Facilities for Treatment and Rehabilitation of Narcotic Drug Users and Addicts," *American Journal of Public Health*, Volume 57, Number 6 (June, 1967) pp. 1025-33.

This study attempted to determine the range and extent of existing programs for treatment and rehabilitation in the United States in respect to services provided and criteria of admission.

Wylie, Evan McLeod. "The Pills Drivers Shouldn't Take," (Condensed from *Family Safety*) *Reader's Digest*, Volume 90 (February, 1967) pp. 83-85.

A description of the ways that many medicinal drugs, especially when combined with alcohol, can render an individual unfit to drive an automobile.

Zellweger, Hans, McDonald, John, and Abbo, Gisela. "Is Lysergic Acid Diethylamide a Teratogen?" *The Lancet*, Volume 2 for 1967, Number 7525 (November 18, 1967) p. 1066.

This case report attempts to show a relationship between the use of LSD and birth deformity.

PAMPHLETS AND OTHERS

A Guide to Illicit Drugs. New York: American Social Health Association, N.D.

This chart describes the habit forming drugs, their slang names, their primary effects, their detection, and the dangers of abusing the drugs. It is quite compact and contains the basic information that a teacher should know about the various drugs.

Barbiturates as Addicting Drugs. (Publication of U.S. Dept. HEW, 1965 revised. Duplicated by and available from the Pennsylvania Department of Health).

This pamphlet points out the dangers of abusing barbiturates and the methods utilized to treat individuals who have taken too large doses of barbiturates.

Collection of Marihuana Papers. Bureau of Narcotics, 633 Indiana Avenue, N.W., Washington, D.C. 20226.

A collection of materials on different aspects of marihuana.

Drug Abuse: The Empty Life. Philadelphia: Smith Kline and French Laboratories, 1965.

A brief description of various types of drugs and some characteristics of drug abusers. Excellent as introductory reading material for students.

Drugs and People . . . About Unhealthy Dependence. Alcoholism and Drug Addiction Research Foundation of Ontario, 24 Harbord St., Toronto 5, Canada.

This comic booklet gives an insight into why people abuse drugs. Because of its appeal, this booklet is excellent for students.

Fact Sheets 1-7. Washington, D.C.: Bureau of Drug Abuse Control, Food and Drug Administration, 1967.

These fact sheets provide information on the Drug Abuse Control Amendments of 1965, the illegal traffic in dangerous drugs, the drug abuser, depressants, hallucinogens, stimulants and controlled drugs. Good sources for non-technical facts.

Hooked. Information Materials Press, 25 W. 4th St., New York, N. Y. 10036.

This comic booklet tells the story of what it is like to be hooked. Excellent for use with students because of its appeal.

Living Death: The Truth About Drug Addiction. Washington, D.C.: U.S. Government Printing Office, 1965.

This pamphlet contains many of the essential facts about drug addiction. May be used for student reading, especially as introductory material.

Patton, Tom. *Some Notes on the Synanon Game.* (Available from Synanon Foundation, Inc., 1351 Ocean Front, Santa Monica, California 90401).

A description of a method used to combat drug addiction.

Selected Publications on Drug Dependence and Abuse. American Social Health Association, 1740 Broadway, New York, N. Y. 10019

A kit comprised of selected publications on drug dependence and abuse. Excellent resource material for teachers.

State of New York: Narcotic Addiction Control Commission (Kit), Executive Park South, Albany, N. Y. 12203.

A kit comprised of information related to the control of drug addiction and the treatment and rehabilitation of drug addicts.

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8.	Tacoma Public Schools Grades 6–12 **Catalog No. Prex 13.8:Ed 8/6**	**Price**	**60¢**
9.	Resource Book for Drug Abuse Education **Catalog No. Fs 2.22:D 84/12**	**Price**	**$1.25**

NOTE: It is recommended that Item No. 9 be used in conjunction with these curricula.

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